

National Ageing Research Institute

Depression in older age: A scoping study

Final Report
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Executive Summary

Depression affects people of all ages, but this study was particularly focused on the knowledge and information available about depression and anxiety amongst older people.

Aim

This study aimed to identify the gaps in current knowledge about diagnosis and treatment of depression and anxiety amongst older adults (those aged over 65 years) in Australia in order to identify priority areas for Australian research into older age depression.

Method

To identify the gaps in current knowledge about diagnosis and treatment of depression and anxiety amongst older adults the following was undertaken:

- A review of published peer reviewed literature;
- A survey of people currently undertaking research into older age depression;
- Advisory group consultations;
- Analysis of findings of a consumer survey (conducted by *beyondblue*);
- A review of *beyondblue*'s Depression Monitor.

Findings

Literature review

The literature review identified groups of older people most at risk of depression and anxiety, including older people in residential aged care, older people with multiple physical co-morbidities, older people with dementia, older people who are carers, older people in hospital, older women, older Indigenous people and older people from CALD backgrounds. This review summarised common screening tools and treatment approaches in late-life depression and anxiety. It also identified barriers to treatment and management of late-life depression. The review also found that older people with depression and anxiety have a much higher risk of suicide than the general population.

The literature review also identified some gaps in current research in late-life depression and anxiety.

Firstly, there is limited research in late-life anxiety compared to depression (although further research is required in both areas).

Secondly, regarding diagnosis and screening tools, there are limited studies on:

- Validation of common screening tools in specific population groups, including older Indigenous people and older people from Culturally and Linguistically Diverse backgrounds;
- Prevalence of depression and anxiety in older people from Culturally and Linguistically Diverse backgrounds and older Indigenous people;
- Diagnosis of depression and anxiety among people with dementia;
- Training and support of early identification of depressive and anxiety disorders for primary care.

Finally, research in relation to treatment and management is limited regarding:

- The efficacy of psychological interventions in depression in later life;
- Multi-factorial intervention approaches in depression in later life;
- The efficacy of other approaches in treatment of late-life depression;
- Cultural factors which can influence the coping strategies older people use and their willingness to seek help;

- Lack of access to specialist services, particularly in rural and remote communities.

Researcher survey and advisory group consultation

The researcher survey, review of websites and advisory group consultations revealed some common areas of research in this field, including:

- Risk factors and prevalence of late-life depression and anxiety;
- Efficacy of antidepressants in treatment of late-life depression;
- Depression and anxiety among particular subgroups of older people, including people living in residential aged care, with medical co-morbidities, living with dementia, carers, and people in rural areas.

Consistent with findings from the literature, there are also some gaps in current research on late-life depression and anxiety in Australia:

- Little research regarding people with special needs, including older Indigenous people, people from CALD backgrounds and people in rural and remote areas;
- A need for more research into the role of primary health care in detecting and managing depression and anxiety;
- Thirdly, there seems to be less research in late-life anxiety compared to late-life depression;
- There is limited research on the efficacy of psychological approaches to treatment of late-life depression and anxiety.

Consumer survey

The consumer surveys revealed that GPs are generally seen as helpful and are an important avenue for diagnosis, advice, treatment and referrals. Counselling was always seen as helpful. There were also some contradictory themes. Medication and exercise were seen as helpful by those using those treatments. The areas identified for further research include alternatives to medication, such as exercise and social programs as well as a focus on prevention.

Depression monitor

Themes emerging from the Depression Monitor indicate that there is a stigma surrounding depression among older people and mental health literacy seems to be poor in this group. General Practitioners are often the first point of contact for older people seeking diagnosis, advice, and treatment on depression. Counselling was not regarded as helpful; neither were other treatment options, such as medication, counselling, psychotherapy and exercise.

Recommendations

The following recommendations have been proposed to *beyondblue*:

Older age depression and anxiety a priority

beyondblue to make older age depression and anxiety a priority in the next research funding round.

National advisory panel on older age mental health

beyondblue to establish a national advisory panel on older age mental health.

National awareness campaign

beyondblue to promote a national awareness campaign to improve mental health literacy amongst older people.

Development of national guidelines

beyondblue to fund the development of national guidelines for identification and treatment of older age depression and anxiety.

1. Introduction

Depression is a serious condition for people of all ages, but for older people depression is often associated with other co-morbid conditions, such as physical disability (Baldwin, 2008; Chiu, Ames, Draper, & Snowdon, 1999) dementia (*beyondblue*, 2007) and anxiety (Ames, Flynn, Tuckwell, & Harrigan, 1994; Bryant, Jackson, & Ames, 2008) that exacerbate the distress experienced by older people and their carers.

There is ongoing debate as to whether the prevalence of depression increases or decreases with age (O'Connor, 2006). It appears that formal diagnoses of depression are less common in older people, with rates considerably lower than those in younger populations (Australian Bureau of Statistics, 1998, 2008). However, when broader measures are used, including those that do not exclude from diagnosing contextual conditions that are more common in older people, such as bereavement or dementia, prevalence rates of between 6% and 20% have been reported in community-dwelling populations (Baldwin, 2008; Chiu et al., 1999), up to 50% in older people living in residential aged care (Cummings, 2002) and 48% in a hospital sample (Bryant, Jackson, & Ames, 2009).

While recognition of older age depression has improved in recent years (Llewellyn-Jones & Snowdon, 2007), there are still gaps in knowledge about assessment and diagnosis for particular population groups (Chiu et al., 1999). There is also insufficient knowledge about effective treatments for depression amongst older people. There have been a considerable number of drug trials over the past 40 years and since anti-depressant medication has become less toxic, it is therefore more likely to be prescribed for older people (Llewellyn-Jones & Snowdon, 2007). There are fewer studies on psychotherapy although there is evidence that cognitive behavioural approaches are effective with older people (Koder, Brodaty, & Anstey, 1996; Nordhus & Pallesen, 2003). Electro-convulsive therapy (ECT) has been found to be effective with older people who have severe depression (Chiu et al., 1999) but the available literature is sparse (Ames, 2001).

An earlier review conducted in Australia examined mental health research activity against the criteria of disease burden and health system costs and concluded that affective disorders and dementia were particularly under-researched given their contribution to burden of disease and health costs (Jorm, Griffiths, Christensen, & Medway, 2003). There is therefore a need for further research into older age depression and anxiety. The purpose of this study is to clarify the direction of future research into older age depression and anxiety in order to set priorities for research conducted by and/or on behalf of *beyondblue*.

2. Study aim and questions

Aim

This study aims to identify the gaps in current knowledge about diagnosis and treatment of depression and anxiety amongst older adults (those aged over 65 years) in Australia in order to identify priority areas for Australian research into older age depression.

Study questions

1. What groups of older people are most at risk of depression and anxiety and therefore most in need of treatment? These could include older people:
 - In residential aged care;
 - In hospital;
 - From Culturally and Linguistically Diverse (CALD) backgrounds or Indigenous backgrounds;
 - Receiving services at home;
 - Who are housebound;
 - Who are carers;
 - Who have experienced significant losses, including bereavement, loss of function, social networks and roles, and the losses associated with migration or being a refugee;
 - With multiple physical co-morbidities, in particular pain, dementia, falls and incontinence;
 - Who live in rural and remote areas.
2. What treatment and management strategies are known to be effective in these groups?
 - Medication treatment;
 - Behavioural approaches, such as physical activity, nutrition;
 - Psychological approaches;
 - Psycho-social approaches;
 - Innovative strategies including telehealth, internet and phone;
 - Strategies that work with the various sub-types of depression and anxiety.
3. What research is being undertaken currently in Australia (published or not yet published) into older age depression?
 - *beyondblue*;
 - NHMRC;
 - ARC;
 - Other Government funded.
4. What areas have been most neglected in research to date?
 - Psycho-social approaches;
 - Socio-economic approaches;
 - Multi-factorial approaches;
 - Translational research – how to translate research findings into action;
 - Assessment and diagnosis of those from CALD or Indigenous backgrounds;
 - GP assessment and care planning.

3. Method

To identify the gaps in current knowledge about diagnosis and treatment of depression and anxiety amongst older adults the following activities have been undertaken:

- A review of published peer reviewed literature;
- A survey of people currently undertaking research into older age depression;
- Advisory group consultations;
- Analysis of findings of a consumer survey (conducted by *beyondblue*);
- A review of *beyondblue*'s Depression Monitor.

3.1 Literature Review

Published peer-reviewed literature on older age depression was reviewed using the following strategy:

- Initially, the review was restricted to reviews and book chapters on older age depression written in the last 10 years. This provided an overview of current knowledge in the area. Where gaps were identified, further searching was conducted to identify any published literature in that area;
- On-line data bases including CINAHL (nursing and allied health), Pubmed (medical), Ovid (scientific and medical) and PsychInfo (psychological) were searched. In addition, project advisers were asked to identify relevant book chapters, government reports and other literature known to them;

The literature review is reported in section 4 below.

3.2 Survey of current research activity

A survey was conducted to capture information about current research in the area (see Appendix A for copy of survey). The findings of the survey are summarized in section 5 of this report. In addition, the websites of relevant funding organisations, including *beyondblue*, NHMRC, ARC, and Department of Health and Ageing (DoHA) were visited to document current research and funding in Australia in late-life depression and anxiety.

3.3 Consumer Survey

A survey was developed by NARI for dissemination by *beyondblue* (see Appendix B). This was sent to older representatives of the relevant consumer committees. The findings of this survey are outlined in section 6.

3.4 Depression Monitor

beyondblue have provided NARI with a summary of findings from their Depression Monitor that are relevant to older people. A brief summary of the relevant points is included in section 7.

3.5 Advisory Group

An advisory group was formed at the beginning of the project to oversee the progress of the project. The members of this panel included the project advisers, Prof. David Ames, Dr Christina Bryant and Dr Dina LoGiudice, a consumer representative, and a representative from *beyondblue*. This group met twice to provide feedback on the first stage of the literature review and the draft final report.

4. Literature Review

Depression and anxiety are serious mental disorders, that affect one in seven (14%) and one in four (26%) people respectively at some point in their lives (Australian Bureau of Statistics, 2008). Currently, one million people in Australia suffer from depression and 2.3 million suffer from anxiety (Australian Bureau of Statistics, 2008).

The term 'depression' in this report refers to all clinically significant forms of depressive disorders, including mild, major, and severe depression. The term 'anxiety' refers to anxiety disorders such as generalised anxiety disorder, specific phobia, social anxiety disorder, and panic disorder with/without agoraphobia. However, there seems to be variation in reference to the terms depression and anxiety in the literature and some studies reported in this literature review report on depressive and anxiety symptoms rather than the clinical disorders.

This literature review summarises current knowledge regarding groups of older people most at risk of depression and anxiety and the treatment and management strategies known to be effective in older people.

The search strategy used in this literature review is outlined in Appendix C. Please see appendix D for a full list of books, book sections, journal articles and reports included in the literature review.

4.1 *Depression and anxiety in older people*

It is a common misconception that depression is a normal part of ageing, but the evidence shows that multiple health problems often account for any initial association between depression and older age (Baldwin, 2008; Baldwin, Chiu, Katona, & Graham, 2002). Depression is essentially the same disorder across the lifespan, although certain symptoms are accentuated and others are suppressed in older people. For example, older people with depression typically report more physical symptoms and less sadness compared to younger people with depression (Baldwin, 2008; Chiu, Tam & Chiu, 2008). Additionally, psychotic symptoms, melancholia, insomnia, hypochondriasis, and subjective memory complaints are more likely to occur in older people with depression compared to younger people with depression (Baldwin, 2008; Baldwin et al., 2002). A recent review found that when confounding variables are controlled (for example, age at study entry), remission rates of depression in patients in late-life are not different from those in midlife, although relapse rates appear higher in older people (Mitchell & Subramaniam, 2005).

Anxiety disorders are also common among older people. However, research in this area is less compared to research undertaken in other mental disorders in older people, such as depression (Wetherell, Maser, & van Balkom, 2005). Of the anxiety disorders, phobic disorders and generalised anxiety disorder (GAD) are the two most common in older people (Beyer, 2004; Bryant et al., 2008; Rodda, Boyce, & Walker, 2008). There has been a certain amount of clinical interest in post-traumatic stress disorder (PTSD), because the survivors of the Second World War and the Holocaust are now well into old age. Moreover, Vietnam Veterans are also approaching old age with well-documented high levels of psychopathology (Owens, Baker, Kasckow, Ciesla, & Mohamed, 2005) that can also have serious effects on the mental health of family members (Galovskia & Lyons, 2003). Prevalence data on PTSD, however, are very limited (Sadavoy, 1997). American studies of Holocaust survivors have found that up to 46% meet criteria for PTSD (Sadavoy, 1997). Weintraub and Ruskin (1999)'s review emphasises the similarities between PTSD in older and younger groups. Other authors have disputed this, and further research is required to establish how different the presentation of PTSD is in older adults from that in younger people.

A recent Australian study found that 11.6% of men and 8.6% of women aged over 65 reported re-experiencing symptoms associated with past events (DSM IV criteria), and concluded that quality of life may be significantly affected in this group (Creamer & Parslow, 2008). This study highlights some of the difficulties in the application of the DSM IV criteria to older adults.

Research on interventions for older people with PTSD is very limited indeed. A recent review of assessment and treatment of PTSD in older combat veterans identified only five studies of psychotherapeutic intervention (Owens et al., 2005). All of these were case studies. A literature search carried out for this review did not identify any randomised controlled trials of psychological intervention for older people diagnosed with PTSD.

Comorbidity of depression and anxiety disorders is highly prevalent (Beekman et al., 2000). A community-based study in the Netherlands found 47.5% of older people with major depressive disorders also met criteria for anxiety disorders, whereas 26.1% of those with anxiety disorders also met criteria for major depressive disorders (Beekman et al., 2000). Mixed anxiety and depressive disorders (where symptoms of both anxiety and depression do not reach diagnostic criteria for either disorder) also frequently occur in older people (Chiu et al., 2008; Rodda et al., 2008). Older people with depression have a 35% lifetime and 23% current prevalence of a co-morbid anxiety disorder (Beyer, 2004). Furthermore, when anxiety symptoms first occur in a person over 60 years of age with no history of anxiety, it generally suggests underlying depression (Baldwin, 2008; Chiu et al., 2008). Indeed, it is quite uncommon that people develop late-onset anxiety disorders for the first time in later life (Chiu et al., 2008), although there are researchers who disagree with this (Wetherell, Maser et al., 2005). Older people with co-morbid depression and anxiety typically have more severe depressive symptoms, an increased likelihood of suicide ideation, lower social functioning (Beyer, 2004; Rodda et al., 2008) and poorer outcome (Schoevers, Beekman, Deeg, Jonker, & van Tilburg, 2003).

4.2 *Diagnosis and screening Tools*

Screening tools are useful in conjunction with a clinical examination in the diagnosis of depressive disorders (Chiu et al., 2008). The most widely accepted screening tool for depressive disorders in older persons is the self-administered Geriatric Depression Scale (GDS) (Yesavage, Roomi, Baldwin, & Connolly, 1983). Other tools include the Center for Epidemiologic Studies Depression Scale (CES-D) (Radloff, 1977) and the Brief Assessment Schedule Depression Cards (BASDC) (Adshead, Cody, & Pitt, 1992). Some of the common screening instruments for anxiety disorders in older people are the State-Trait Anxiety Inventory (STAI) (Spielberger, Gorsuch, & Lushene, 1970), the Geriatric Anxiety Inventory (GAI) (Pachana et al., 2007) and Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith, 1983). The Neuropsychiatric Inventory (NPI) (Cummings et al., 1994) screens for both depression and anxiety as well as ten other syndromes. A recent review (Watson & Pignone, 2003) showed that both the GDS and CES-D had good sensitivities and specificities in detecting late-life major depression. However, there seemed to be a lack of screening tools for subthreshold depressive disorders (Watson & Pignone, 2003).

Cultural influence is an important issue that needs to be considered in the diagnosis of depression, because of cultural differences in the definition, conceptualisation and experience of depression (Chiu et al., 2008). For example, the mainstream concept of mental health comes more from an illness or clinical perspective and focuses more on the individual and their level of functioning in their environment while the Indigenous concept of mental health is much broader and emphasises the importance of connection to land, culture, spirituality, ancestry, family and community, and how these affect the individual (Social

Health Reference Group, 2004). The difference in perception of mental health and depression gave rise to some concerns about cross-cultural aspects in the diagnosis of depression, with the risk of some symptoms being misinterpreted by mainstream mental health professionals (Thomson, Krom, Trevaskis, Weisssofner, & Leggett, 2005). A review of community prevalence of depression in later life found that the majority of outlying (both low and high prevalence) findings originated in non-English-speaking countries (Beekman, Copeland, & Prince, 1999). Although this finding might be taken as an indication of culture-based differences in rates of depression, it might also indicate systematic bias due to translation of screening instruments (Beekman et al., 1999).

A further issue in diagnosis of depression and anxiety is the difficulty in diagnosis for people with dementia. There are some screening tools that have been designed for older people with cognitive impairment, for example, the Cornell Scale for Depression in Dementia (CSDD) (Alexopoulos, Abrams, Young, & Shamoian, 1988) and the Rating Anxiety in Dementia Scale (Shankar, Walker, & Frost, 1999). However, diagnosing depression and anxiety in older people with dementia is particularly difficult as symptoms of depression and anxiety often overlap with symptoms of dementia (Jorm, 2000, 2001; Seignourel, Kunik, Snow, Wilson, & Stanley, 2008). Furthermore, there is some evidence that late onset depression can be a prodromal disorder for dementia (Schweitzer, Tuckwell, O'Brien, & Ames, 2002).

Of vital importance in the process of diagnosis is early recognition of depressive and anxiety symptoms in older people. However, studies have found that depression and anxiety is often undetected or under-diagnosed in older people (Alwahhabi, 2003; Snowdon, 1998; World Health Organization, 2001). General practitioners (GPs) are in a central position of early recognition of depressive and anxiety symptoms. However, some Australian studies have found that GPs were unaware of many depressive symptoms (O'Connor, Rosewarne, & Bruce, 2001b) and that depression symptoms are inadequately recognised and treated in nursing homes (Sandra, Stella, Daniel, & David, 2006). There is some evidence that training in the use of an assessment tool and an education session on late-life depression was associated with an improvement in GPs' recognition of late-life depression in nursing homes (Sandra et al., 2006).

4.3 Prevalence of depression and anxiety

The prevalence literature of older age depression is inconsistent, for example, a recent review of 122 papers in this area found that the reported prevalence of depression in older people ranged from 1% to 49% (Djernes, 2006). The wide difference in the figures is largely due to methodological differences (Beekman et al., 1999), such as the definition of depression, the sampling strategies and the sample sizes (Pirkis et al., 2009). For example, studies focusing on depressive symptoms tended to report higher prevalence than studies focusing on depressive disorders. Further, common diagnostic criteria, such as ICD-10 and DSM-IV-R, provide different specifications for depressive disorders. There is evidence that the prevalence of depression is affected by the diagnostic criteria adopted in the study and it is suggested that there should be more detailed specification of depressive disorders to improve our understanding of depression among older people (Henderson et al., 1993; Kay, Henderson, & Scott, 1985).

Studies with community dwelling participants also tended to have a lower prevalence than studies where participants were from institutions (e.g., residential aged care facilities). For older people living in the community, between 10-15% experience symptoms of depression (Baldwin, 2008; Baldwin et al., 2002; Cole, 2003). The 2007 National Survey of Mental Health and Wellbeing found that the 12-month prevalence for depression and anxiety was 2% and 5%, respectively for older people living in private dwellings (Australian Bureau of

Statistics, 2008). Another Australian study found that the prevalence of depression was 8.2% among a sample of 22,252 community-dwelling older people (Pirkis et al., 2009). However, the prevalence rate is much higher in residential aged care facilities and a recent Australian study found that 34.7% of aged care residents suffered from depression (Snowdon & Fleming, 2008).

Similar to studies in depression, the reported prevalence of anxiety among older people is inconsistent. It is estimated that approximately 10% of community-dwelling older people have a diagnosable anxiety disorder (Bryant et al., 2008). Some studies found that anxiety might be more prevalent in older people than depression (Beekman et al., 2000). For example, a recent Australian study found that of people aged between 70 and 74 years, 3% were classed as having GAD compared to 1.7% categorised as having depression (Bryant et al., 2008). The 2007 National Survey of Mental Health and Wellbeing also found that anxiety disorders are more prevalent than affective disorders in people aged 65 and over (Australian Bureau of Statistics, 2008).

There is limited Australian data on the prevalence of depression and anxiety in older Indigenous people and people from CALD backgrounds. However, there is some evidence that older Indigenous people and people from CALD backgrounds might be at greater risk of depression than the general community. A review of depression among older Asian immigrants in North America found that depression is prevalent among this population and the prevalence ranges from 18% to 31.1% (Kuo, Chong, & Joseph, 2008). A 2009 Australian Institute of Health and Welfare report found that over one quarter of Indigenous adults reported high or very high levels of psychological distress and that Indigenous Australians were twice as likely to report high or very high levels of psychological distress as non-Indigenous Australians (Australian Institute of Health and Welfare, 2009a). An earlier AIHW report found that more than three-fifths of people presenting to Aboriginal community controlled health services have a significant level of mental distress, principally depression (Australian Institute of Health and Welfare, 1998). Therefore, despite the lack of specific information about the incidence and prevalence of depression and anxiety among older Indigenous peoples, these data seem to support the conclusion that 'serious psychiatric disorders occur in Indigenous populations, and are at least as common as in the mainstream population' (Hunter, 2003, p. 140).

4.4 Aetiology of late-life depression and anxiety

It is now well accepted that causes of late-life depression and anxiety are multifactorial and that no single risk factor is responsible for late-life depression and anxiety (Baldwin, 2008; Beekman et al., 1998; Blazer, 2003; Chiu et al., 1999; Chiu et al., 2009; Chiu et al., 2008; Vink, Aartsen, & Schoevers, 2008). Instead, the development of late-life depression and anxiety is "the accumulation of risks over time" (Chiu et al., 2008, p. 24). Importantly, there is no evidence that ageing per se is a risk factor for depression or anxiety in late-life (Baldwin et al., 2002; Beekman et al., 1998).

4.4.1 Risk factors for late-life depression and anxiety

Studies that investigate the risk factors (including biological, physical and social factors) for depression and anxiety in older people are predominantly observational studies.

There is evidence that depressive disorders and disability are highly correlated (Baldwin et al., 2002). For example, the depression rate in older people receiving a high level of support at home is approximately twice as high as less frail community-dwelling older people (Baldwin et al., 2002). Therefore, older people in settings where disability is high, such as residential aged care facilities,

hospitals, older people with chronic illness and frail older people at home, are at greater risk of depression. Other risk factors identified for late-life depression include a history of depression, low socio-economic status, external locus of control, bereavement, new medical illness, poor self-rated health, being female and being unmarried (Baldwin, 2008; Baldwin et al., 2002; Beekman et al., 1999; Beekman et al., 2000; Cole, 2003, 2005; Vink et al., 2008). The loss of a significant other, including spouse, family member, close friend, or pet, is also associated with an increased risk of depression (Baldwin et al., 2002). It is important to remember, however, that not all significant life events/losses are followed by depression, and not all older people with depression experience significant life events/losses beforehand.

Risk factors of having an anxiety disorder in later life include previously having a psychological disorder(s), poor coping strategies, stressful life events, and being female (Vink et al., 2008).

The literature regarding the effects of retirement on older people's mental health is inconsistent (Butterworth et al., 2006). While some studies found increased depression and/or anxiety (Richardson & Kilty, 1991), others reported lower rates of depression and anxiety following retirement (Butterworth et al., 2006; Villamil, Huppert, & Melzer, 2006).

Vink, Aartsen and Schoevers (2008) provided a comprehensive overview of risk factors for late-life anxiety and depression. The review revealed considerable overlap between the risk profiles for anxiety and depression in older people, such as chronic diseases, disability and bereavement. However, the review also found some differences in risk factors for late-life anxiety and depression. Biological factors, including chronic health conditions, cognitive impairment and functional limitations, may be more important in predicting depression. Also, there seems to be a differential effect of social factors on depression and anxiety. For example, stressful events are important predictors for both anxiety and depression, but traumatic events are predictors for only anxiety.

A community-based study in the Netherlands found that external locus of control was the only common risk factor for pure depression and pure anxiety in later life while family history was associated with concurrent anxiety and depression (Beekman et al., 2000).

4.4.2 Groups of older people most at risk

Based on research evidence on prevalence and risk factors of depression and anxiety in older people, it appears that the groups of older people at most risk of depression and anxiety are:

Older people in residential aged care

A recent Australian study (Snowdon & Fleming, 2008) found that the prevalence of depression was 34.7% in aged care residents. Other studies reported prevalence rates from 14 to 45% (Baldwin et al., 2002; Menzel, 2008; Rodda et al., 2008), depending on the methodology and diagnostic criteria used. Older people living in residential aged care also have a higher rate of anxiety disorders than other groups of older people (Rodda et al., 2008).

Older people with multiple physical co-morbidities

It is well established that a common issue with diagnosing depression and anxiety in older people is multiple physical co-morbidities (Pfaff et al., 2009; Schoevers et al., 2003). Indeed, the high risk of depression and anxiety in older people is significantly accounted for by the high prevalence of physical illness (Beyer, 2004; Menzel, 2008; Rodda et al., 2008). Medical comorbidity is also a risk factor for inferior treatment response and poor antidepressant tolerability among older

people with depression (Mitchell & Subramaniam, 2005) and is often associated with a worse outcome in the follow-up (Cole, Bellavance, & Mansour, 1999; Licht-Strunk, van der Windt, van Marwijk, de Haan, & Beekman, 2007). Moreover, depression and anxiety are risk factors for the development and progression of disability (Lenze et al., 2001). However, the relationship between depression/anxiety and health problems is complex and bi-directional: while depression and anxiety are risk factors for some physical conditions such as stroke and cardiovascular disease, disability due to physical illness is a risk factor for depression and anxiety (Baldwin et al., 2002; Beyer, 2004).

Older people with dementia

It is estimated that 20% of older people with Alzheimer's disease experience moderate to severe depression (Baldwin, 2008). Furthermore, depression accelerates functional decline in older people with dementia (Baldwin et al., 2002). There is growing evidence that depression increases the risk of older people later developing cognitive impairment or dementia (Baldwin, 2008; Blazer, 2003; Chiu et al., 2008; Jorm, 2000, 2001). Prevalence estimates of anxiety in older people with dementia vary greatly, from 5-21% for anxiety disorders and 8-71% for anxiety symptoms (Seignourel et al., 2008). A recent Australian study found that clinical depression in nursing home facilities most often occurs in residents who also exhibit pronounced cognitive impairment (McSweeney & O'Connor, 2008). There is also some evidence that clinically significant anxiety symptoms may predict accelerated cognitive decline (Beaudreau & O'Hara, 2008) and that older people with cognitive impairment are associated with worse outcomes for depression in follow-up (Cole et al., 1999).

Older people who are carers

Older carers of people with chronic illness, such as dementia, are at increased risk of developing depression (Baldwin, 2008; Baldwin et al., 2002) and anxiety (Cooper, Balamurali, & Livingston, 2007). A recent Australian study found that up to 23.5% of carers of older people with dementia are reported to have anxiety disorders (Bryant et al., 2008).

Older people in hospital

The prevalence of depression among older people in hospital ranges from 10 to 45%, averaging around 20% (Baldwin, 2008; Baldwin et al., 2002; Koenig & Blazer, 2004). Older people in hospital have high levels of anxiety symptoms (up to 65%) and anxiety symptomatology is a potential risk factor for poorer outcome (Bryant et al., 2008).

Older women

Females are at greater risk of developing depression throughout the lifespan, including the later years, with a female to male ratio of 2:1 (Baldwin, 2008; Baldwin et al., 2002; Koenig & Blazer, 2004). Older women are also more likely to have anxiety disorders, such as GAD, than older men (Beyer, 2004). These findings are consistent with the 2007 National Survey of Mental Health and Wellbeing, which found that older women are more likely than older men to suffer affective disorders and anxiety disorders. (Slade et al., 2009)

Older Indigenous people

Although there is limited data on prevalence of depression among older Indigenous people, there is some evidence that depression is prevalent in this population (Thomson et al., 2005). The 'impact of history and the past and ongoing effects of colonisation' have been found to be the primary causes for mental illness and mental health problems among Indigenous people (Swan & Raphael, 1995, p. 67). Although the impact and effects have varied over time and

across Australia, they have resulted in trauma, grief and loss for successive generations of Indigenous people (Thomson et al., 2005).

Older people from CALD backgrounds

There is some preliminary evidence that depression is prevalent among older people from CALD backgrounds (Kuo et al., 2008). Depression among this group is linked to experience of immigration, English proficiency, acculturation, service barriers, and family relationship (Kuo et al., 2008).

4.5 Treatment and management

4.5.1 Approaches in treatment and management

The treatment of depression occurs through medical (such as antidepressant medication, electroconvulsive therapy) and psychological interventions (such as cognitive behaviour therapy and interpersonal therapy) (Baldwin et al., 2002; Chiu et al., 2008). Antidepressant medication is usually used for more severe symptoms, while psychosocial interventions focus on precipitating and maintaining psychological and social factors (Australian Institute of Health and Welfare, 1998).

Medical approaches

There has been some evidence on the efficacy and safety of antidepressant medication and electroconvulsive therapy on the treatment of late-life depression (Baldwin et al., 2002; Chiu et al., 2008; Frazer, Christensen, & Griffiths, 2005; Salzman, Wong, & Wright, 2002). However, most published studies examine small sample sizes and some do not include common co-morbid psychiatric and medical conditions (Taylor & Doraiswamy, 2004).

A recent Australian Institute of Health and Welfare publication reports on the patterns of mental health related prescriptions seeing a decline in the last 4-5 years:

Overall, mental health-related prescriptions decreased from 20.7 million in 2003–04 to 20.4 million in 2007–08, at an annual average rate of 0.4%. The rate of prescriptions (per 1,000 population) declined from 1,035 in 2003–04 to 962 in 2007–08 at an average annual rate of 1.8%. There were increases in the number of psychostimulants and nootropics, and antipsychotics prescribed (on average by 12.0% and 8.7% per year, respectively). However, prescriptions for hypnotics and sedatives decreased on average by 3.5% per year, while prescriptions for anxiolytics, antidepressants and other medications prescribed by psychiatrists decreased on average by around 1% per year (Australian Institute of Health and Welfare, 2009b, p. 123).

However, data appear not to be available on prescribing patterns by age groups.

Psychological approaches

There has been some evidence on the efficacy of psychotherapy in late-life depression (Pinquart, Duberstein, & Lyness, 2006; Skultety & Zeiss, 2006) and anxiety (Hendriks, Voshaar, Keijsers, Hoogduin, & vanBalkom, 2008; Nordhus & Pallesen, 2003; Wetherell, Sorrell, Thorp, & Patterson, 2005). In particular, cognitive behaviour therapy and interpersonal psychotherapy have been shown as effective treatments for depressed older people, either alone or as an adjunct to antidepressant medication (Frazer et al., 2005; Steinman et al., 2007). There is also some evidence that older adults with minor depression or dysthymia may be more likely to benefit from psychotherapeutic interventions than from antidepressants (Pinquart et al., 2006).

However, many of these efficacy studies are limited to older people who reached a diagnostic threshold and excluded those with 'subcase level depression' (Freudenstein, Jagger, Arthur, & Donner-Banzhoff, 2001). As less severe depression is far more common than severe depression in older people, more research is required in this area (Frederick et al., 2007; Freudenstein et al., 2001).

Some recent studies found that the use of pharmacotherapy, but not interpersonal psychotherapy, is effective to prevent recurrent depression (Reynolds et al., 2006) and preserve overall wellbeing (Dombrowski et al., 2007) in older people with depression at the 2 year follow-up. However, the lack of follow-up data precluded conclusions on the long-term efficacy of psychological therapy in late-life depression and anxiety (Hendriks et al., 2008; Nordhus & Pallesen, 2003).

The importance of an integrated approach

These different medical and psychological interventions for late-life depression should be thought of as synergistic rather than mutually exclusive (Chiu et al., 2008) and treatment of depression needs to take an integrated and multidisciplinary approach to reflect the multiple factors affecting the development and course of depressive disorders. A recent Australian study has found that the outcome of depression among elderly people in residential care can be improved by multidisciplinary collaboration and by enhancing the clinical skills of general practitioners and care staff (McSweeney & O'Connor, 2008). Another study trialled a program that incorporated several strategies, including staff training, the life story initiative, regular 'talk and walk' program, training and support group for family carers (Jordan, Byrne, & Bushell, 2009). The study found that these strategies not only help the staff to improve their knowledge and self-efficacy in recognising and managing late-life depression, but also help residents to be more positive as they adjust to their new environment. However, more studies are needed to provide a better evidence base for the integrated and multidisciplinary approach in treatment of late-life depression and anxiety.

Other approaches

There is some preliminary evidence for other approaches, such as physical activity interventions (Singh, Clements, & Singh, 2001; Strawbridge, Deleger, Roberts, & Kaplan, 2002), reminiscence and life review (Bohlmeijer, Smit, & Cuijpers, 2003; Hsieh & Wang, 2003), behavioural approaches and psychosocial approaches for treatment of late-life depression. However, further research is needed to provide a better evidence base.

Other important issues

An important issue in studies on treatment is that cultural factors can influence the coping strategies older people use and their willingness to seek help from general practitioners and mental health personnel (Chiu et al., 2008; Murray et al., 2006; Zivin & Kales, 2008). A recent study in Western Australia found that Indigenous participants perceived depression as a characteristic of the individual concerned stating 'that's just the way he is' (Vicary & Westerman, 2004, p. 6). They also found that 'Aboriginal people did not perceive depression as a state that could be addressed via treatment' (Vicary & Westerman, 2004, p. 6). Therefore, for many Indigenous people with depression and/or anxiety, successful treatment needs to be a blend of mainstream treatments (such as medication, counselling and hospitalisation) and Indigenous strategies, such as building resilience against harmful spirits and increasing wellness and involving traditional healers and the person's family (Thomson et al., 2005; Vicary & Westerman, 2004).

There are also other barriers to attaining effective treatment, including lack of access to specialist services, particularly in rural and remote communities (Australian Institute of Health and Welfare, 1998). A systematic review of evaluations of two Australian web-based mental health programs (MoodGYM and BluePages Depression Information) found that Internet-based applications were effective in reducing depressive symptoms and stigmatising attitudes to depression and in improving depression literacy (Griffiths & Christensen, 2007). As accessibility of mental health services and professionals in rural areas is very low by comparison with major cities, the Internet might be an alternative for the delivery of help for depression in rural regions.

4.5.2 Barriers in treatment and management

This section identifies a range of additional barriers in the treatment and management of depression in older people.

Stigma and poor mental health literacy

Studies have found that older people are particularly affected by traditional stigma surrounding depression (Griffiths, Christensen, & Jorm, 2008; Murray et al., 2006) and have poorer mental health literacy (Farrer, Leach, Griffiths, Christensen, & Jorm, 2008). These factors may affect whether appropriate help is sought, whether it is adhered to, and how people respond to others with mental disorders (Jorm, 2007; Zivin & Kales, 2008). Stigma and poor mental health literacy might explain the result of an Australian study, which found older patients often do not report depressive symptoms to their medical practitioner (O'Connor, Rosewarne, & Bruce, 2001a). It might also explain the finding of the 2007 National Survey of Mental Health and Wellbeing, which found that older people are least likely to use mental health services compared to other age groups, with less than one quarter of older people having used services for mental health problems in the previous 12 months (Slade et al., 2009).

Community surveys have found that *beyondblue*: the national depression initiative had a positive effect on some beliefs about depression, including greater awareness of depression, improved beliefs about treatments and about the benefits of help-seeking in general (Jorm, Christensen, & Griffiths, 2005, 2006). However, consideration should be given to developing targeted programs for older people to reduce stigma and increase mental health literacy for depression (Farrer et al., 2008).

Ageism

Ageism, that is, holding negative attitudes or beliefs about older people and acting on these prejudices to treat older people differently from other age groups, is another barrier in treatment and management of late-life depression and anxiety. Ageism can be expressed in a wide range of phenomena, from subtle avoidance of contact to outright disdain and dislike, and discriminatory practices in employment and public services (Butler, 1969). These public services include health services, where stereotyping can contribute to the risk of misdiagnosis or poor care decisions. There is a wide body of literature on ageist behaviour in medical settings, with health professionals frequently tending to patronise, to listen less to the patient's views, to give less time to the interview, to order fewer diagnostic tests, and to attribute symptoms to age rather than to treatable conditions (Adelman, Greene, Charon, & Friedman, 1990; Allman, Ragan, Newsome, Scoufos, & Nussbaum, 1999; Beisecker & Beisecker, 1996; Greene, Adelman, Charon, & Hoffman, 1986). Mental health is a particularly neglected area, where elderly patients are referred less frequently to psychiatrists than younger patients with the same symptoms (Cuddy & Fiske, 2002).

Lack of professionals specialised in late-life depression/anxiety

A number of studies have suggested that there is a reluctance to work with older people among health students, including nursing students (Lovell, 2006), medical students (Reuben, Fullerton, Tschann, & Crougban-Minihane, 1995), clinical psychology trainees (Lee, Volans, & Gregory, 2003) and social work students (Cummings, Adler, & DeCoster, 2005). This finding among health students is consistent with other studies that have found a low percentage of clinical psychologists specialising in working with older people (Koder & Helmes, 2006a; 2006b). The shortage of professionals working with older people also means a shortage of placements for students to have positive experiences with older people.

4.5.3 Suicide and older people

Older people have a much higher risk of suicide than the general population (World Health Organization, 2001). Moreover, of those who attempt suicide, older people are most likely to complete the attempt (Rodda et al., 2008), with males 3-4 times more likely to suicide than females (Rodda et al., 2008). Therefore, any suicide attempt by an older person should be taken seriously, even those attempts deemed not medically serious (Chiu et al., 2008). Up to 83% of older people who complete suicide suffered from depression (Baldwin et al., 2002; Rodda et al., 2008). Additional risk factors for suicide in later life are previous suicide attempts, other psychiatric conditions, serious physical illness, social isolation, poor social support, and significant loss including bereavement (Baldwin et al., 2002; Chiu et al., 2008).

Anxiety increases older people's risk of mortality, both from suicide and physical illness such as cardiovascular disease (Bryant et al., 2008).

Furthermore, there is some evidence that although primary care physicians are capable of recognising suicidal ideation in older people, they are less willing to use and less optimistic about the usefulness of therapeutic strategies among older people (Uncapher & Arian, 2000).

4.6 Summary

The literature review has identified groups of older people most at risk of depression and anxiety, including older people in residential aged care, older people with multiple physical co-morbidities, older people with dementia, older people who are carers, older people in hospital, older women, older Indigenous people and older people from CALD backgrounds. This review has summarised common screening tools and treatment approaches in late-life depression and anxiety. It also identified some barriers in treatment and management of late-life depression and anxiety, including low mental health literacy, ageism and lack of professionals specialised in late-life depression/anxiety. The review also found that older people with depression and anxiety have a much higher risk of suicide than the general population.

The literature review has identified some gaps in current research in late-life depression and anxiety.

Firstly, there is limited research in late-life anxiety compared to depression (although further research is required in both areas).

Secondly, in relation to diagnosis and screening tools, there are limited studies on:

- Validation of common screening tools in specific population groups, including older Indigenous people and older people from Culturally and Linguistically Diverse backgrounds;

- Prevalence of depression and anxiety in older people from Culturally and Linguistically Diverse backgrounds and older Indigenous people;
- Diagnosis of depression and anxiety among people with dementia;
- Training and support of early identification of depressive and anxiety disorders for primary care.

Finally, research in relation to treatment and management is limited regarding:

- The efficacy of psychological interventions in depression in later life;
- Multi-factorial intervention approaches in depression in later life;
- The efficacy of other approaches (e.g., behavioural) in treatment of late-life depression;
- Cultural factors which can influence the coping strategies older people use and their willingness to seek help;
- Lack of access to specialist services, particularly in rural and remote communities.

5. Current Research in Australia

5.1 Researcher Survey

5.1.1 Introduction

A survey was conducted to capture information about current research in the area of depression and old age. The survey was distributed to key researchers in the area. The respondents targeted included professors of old age psychiatry in all states of Australia, researchers funded by *beyondblue* Centre for Research Excellence, National Health and Medical Research Council (NHMRC), Australian Research Council (ARC) and others identified who conduct research into depression that involves older people. Organisations that have an interest in research into older age depression, such as the Victorian Transcultural Psychiatry Unit were also targeted.

Thirty-five surveys were distributed and 15 (42.85%) were returned. Thirteen of these surveys were completed electronically and returned via email; one was completed via the telephone; one was completed face-to-face. The survey included an explanatory letter describing the study.

The survey included the following questions:

1. Could you please list all current research in the area of older age depression and anxiety that you are involved in?
2. Do you plan to undertake any (other) research in the area of depression/anxiety and older people in the next five years?
3. Can you identify any gaps in current research in the area of older age depression/anxiety? This could include but is not limited to treatment and management, diagnosis, groups at risk, service gaps, issues for GPs, limited services.
4. What should *beyondblue* be funding in relation to older age depression/anxiety research (e.g. research areas, target groups, research methodologies, groups at risk, etc)? Please provide rationale and data (if available)?
5. Do you have any other suggestions?

5.1.2 Survey findings

Current research

There was a wide range of research currently being conducted by the survey respondents. The following broad areas were identified.

Prevalence and risk factors

There are a number of studies investigating factors associated with depression and anxiety in late-life. These include studies investigating:

- Cohort factors;
- Lifestyle, life events, social circumstances, medical comorbidity, and biochemical, neuroimaging and genetic markers;
- Marital status and social networks;
- Anterior cingulate and hippocampal volume (MRI);
- Treatment-resistant depression;
- Predictors of clinically significant anxiety.

There are also a number of studies where depression is one measure in a broader longitudinal study of older people's health. These include:

- Depression and comorbidity longitudinal trends – using the MELSHA and DYNOPTA datasets;
- Mid and older cohorts of the Australian Longitudinal Study on Women's Health
- The Longitudinal Ageing Women study at the Royal Brisbane Hospital;
- Memory and ageing study – epidemiologic study examining rates of depression, anxiety and positive affect in population sample of 70-90 year olds;
- The impact of physical activity upon depressive status over time - using the MELSHA and DYNOPTA datasets.

Depression in specific sub-populations

Another group of studies investigate depression in specific sub-groups who are considered to be at risk of depression. These include:

- People who have had a stroke - rates, prognosis and predictors of depression after stroke;
- Predictors of anxiety and depression in a rural Australian cohort;
- People with cognitive decline and/or who are living with dementia;
- Carers - in-depth interviews with consenting carers – *beyondblue* funded a sub-study of an NHMRC study and PhD study looking specifically at the course of depression in subjects and carers, funded through Rotary Health.

Measurement

There is some research into measurement of anxiety and depression in older people, including:

- The validity of CIDI in measuring rates of anxiety and depression in aged respondents in community surveys;
- Development of a new scale to measure anxiety in older people, the 20-item Geriatric Anxiety Inventory (GAI);
- Indigenous assessment of depression in rural remote areas.

Treatment

Research into treatments includes one study investigating the impact of antidepressant medication on someone with dementia, and two psycho-educational trials, including:

- Exercise vs psycho education trial for mild/moderate depression in older war widows with a focus on the role of bereavement and successful ageing parameters in mood;
- The DEPS-GP project – a clustered RCT of GP depression education and effects on patient outcomes for depression and suicidal ideas.

There are also two multi-factorial trials including a randomised trial investigating the efficacy and effectiveness of lifestyle and pharmacological interventions on short and medium term depression outcomes and a multi-centre research project on suicide prevention in older adults.

Residential aged care

Given the high prevalence of depression in residential aged care, it is not surprising that this is the focus of much of the current research. Studies include:

- The effectiveness of "best practice" psychosocial and pharmacological treatments of depression in aged residential facilities (*beyondblue*);
- The effectiveness of group counselling in reducing levels of depression and anxiety in the spouses of people living in aged residential facilities (Wicking Trust);

- Reviews by GPs of antidepressant prescriptions in residential aged care facilities (Wicking Trust);
- The effectiveness of lavender oil in reducing agitation in people with dementia living in residential aged care facilities (NH&MRC; Brockhoff Trust);
- The effectiveness of Montessori-type activities in reducing agitation in people with dementia living in residential aged care facilities (Dementia-CRC);
- SMILE study – humour intervention for depression in nursing homes.

There are also two different intervention studies in residential aged care examining levels of and change in depression symptoms. One is examining levels and change in depression symptoms as part of a longitudinal study of the effects of community aged care services and another examining levels of depression and anxiety symptoms as part of an epidemiological survey of cognitive ageing and dementia in older persons.

Service effectiveness

Finally, a group of studies are focusing on the effectiveness of the existing service system. These include:

- Psychological autopsy of middle-aged and older suicide victims – a focus is depression, anxiety and the last contact that they had with health professionals;
- Examination of hospital based service delivery for anxiety and depression in older people using National Hospital Morbidity Database;
- NHMRC funded study focusing on dementia and whether GPs identify and distinguish memory problems against depression.

Five-year plan

Most survey respondents were planning to build on their existing research within the next five years. New areas identified included:

- The role of pharmacists in assisting staff and GPs to monitor the mood and behaviour of people in residential aged care facilities who are prescribed antidepressants and/or antipsychotics;
- Health services study with CRC – pilot funding to look at general practice nurses who can assist with dementia diagnosis and depression;
- The development, implementation and evaluation of a depression assessment tool for use in the management of chronic stroke survivors;
- The impact of physical activity (probably strength training) on depressive status in people with: (a) mild cognitive impairment (b) dementia;
- Caregiver depression and anxiety, and also interventions for carers as well as persons with dementia in residential aged care facilities;
- A multi-centre clinical research project trying to streamline treatment protocols for older adults with depression across states and services;
- Follow up Indigenous older people including assessment, diagnosis of depression;
- CALD assessment tools including depression.

Gaps

Respondents identified a number of gaps in the current research. The most frequently identified gap was research into depression and anxiety in CALD and Indigenous groups, with six respondents identifying this gap.

The second most frequently identified gap was diagnosis and treatment of depression and anxiety in primary care. The need for GPs to be more aware of depression and anxiety in older people, to be able to differentially diagnose depression and dementia and to detect those at risk of suicide was identified as an area for future research. There were also questions raised about the potential

role of nurses in primary care, as practice nurses, advanced practitioners and/or mental health nurses.

The third most frequently identified gap was research into older age anxiety. This was seen as under researched compared with depression, although there were many unanswered questions relating to older age depression.

There were also areas in which current knowledge may or may not apply to older people. These included questions about the applicability of the current diagnostic criteria; the impact of co-morbidities, such as stroke and dementia on depression and anxiety; and the impact of anti-depressant medication on older people.

Rural and remote populations were seen as being under-researched as was depression in older people in residential aged care. Carers were also identified as an at-risk group requiring further investigation.

Finally, there were some treatment modalities that were seen as under researched in older people. These included psychological interventions, such as Cognitive Behaviour Therapy, and alternative therapies, including fish oil.

5.2 Web search

***beyondblue*, NHMRC and ARC**

The websites of relevant funding organisations, including *beyondblue*, NHMRC and ARC, were visited to document current funding on Australian research in late-life depression and anxiety. Appendix D includes a list of recently funded projects by *beyondblue* (n=19) and the NHMRC (n=6, of which depression/anxiety was not the main focus of one of these projects). The ARC did not fund any projects related to late-life depression or anxiety. It appears that there was only one project (NHMRC funded) that had a focus specifically on anxiety.

The projects were analysed by study areas and target groups. In terms of study areas:

- Nine of the 25 projects focused on treatment (e.g. physical exercise), management or care for older people with depression/anxiety;
- Eight projects focused on diagnosis, screening or recognising late-life depression;
- Four projects focused on improving awareness and knowledge of late-life depression/anxiety;
- Four projects focused on other areas (carers on-line; improving health and wellbeing; depression, anxiety, substance use and cognitive change; assessing the health needs of older Indigenous Australians).

For target groups, nine projects did not specify their target groups. For the remaining 16 projects, the target groups included¹:

- Older people in residential aged care facilities (n=6);
- Professional carers (n=4);
- People with dementia (n=4);
- GPs (n=3);
- Carers (n=3);
- People in rural areas (n=1);
- People from CALD backgrounds (n=1);

¹ Please note that each project might include more than one target group.

- Indigenous people (n=1).

Department of Health and Ageing (DoHA), Ageing Research Online (ARO) websites and other information

The Department of Health and Ageing website was also searched; however, there is no section on depression funded projects or research. Contact with DoHA suggests that there are few current projects related to depression and anxiety in older people.

The Ageing Research Online (ARO) website was also searched. A search by the keyword "depression" produced 35 results and the search by "anxiety" produced 12 results. Of these projects, five appeared in both sections and three have been included as projects funded by *beyondblue* and NHMRC. A further 25 projects were excluded either because depression or anxiety was not a focus of the project or because the project was conducted before 2000. As a result, a total of 14 projects were identified as relevant for the current study (see Appendix E for the list of these projects). Six of the projects have a focus on anxiety, another six have a focus on depression, and the remaining two have a focus on both depression and anxiety. As with projects funded by *beyondblue* and NHMRC, these projects were further analysed by study areas and target groups of the study.

For study areas:

- Four projects focused on treatment or care for older people with depression/anxiety;
- Three projects focused on impact of anxiety on different aspects of daily life;
- One project focused on screening measures of late anxiety;
- The remaining six projects focused on a range of other areas.

For target groups, the following were identified²:

- Older people in residential aged care facilities (n=3);
- Women (n=2);
- People with physical illness (n=2);
- Carers (n=1);
- People from CALD backgrounds (n=1);
- Veterans (n=1);
- Men (n=1).

In NSW, the State Department supports a Stakeholder Group that informs the State Health Department about older people's mental health issues. This initiative allows older people to have direct access to policy officers and contribute to policy development. Appendix F provides additional information about this Stakeholder group.

5.3 Summary

This chapter has revealed some common areas of research in this field, including:

- Risk factors and prevalence of late-life depression and anxiety;
- Efficacy of antidepressants in treatment of late-life depression;

² Please note that each project might include more than one target group.

- Depression and anxiety among particular subgroups of older people, including people living in residential aged care, with medical co-morbidities, living with dementia, carers, and people in rural areas.

Consistent with findings from the literature, there are also some gaps in current research on late-life depression and anxiety in Australia. Firstly, there is little research regarding people with special needs, including older Indigenous people, older people from CALD backgrounds and people in rural and remote areas. Secondly, there is a need for more research into the role of primary health care in detecting and managing depression and anxiety. Thirdly, there seems to be less research in late-life anxiety compared to late-life depression. Finally, there is limited research on the efficacy of psychological approaches to treatment of late-life depression and anxiety.

6. Consumer Survey Findings

6.1 Demographics

In late July 2009, the consumer survey was sent out by *beyondblue* to 8 BlueVoices members who are aged over 65. Five members completed and returned the survey (response rate: 63%). The respondents were all male. The average age was 74.6 years (range 65-88 years). One respondent had cared for his wife with depression and all respondents (including the carer) had depression themselves. Four gave a length of time since diagnosis and the average length of time was 27.25 years (range 11 to 52 years).

All respondents were born in Australia and were English speaking and four were married and one widowed. Three were from Queensland, one from South Australia and one from Victoria.

6.2 Survey findings

6.2.1 Community awareness

Four respondents had ideas about improving community awareness of depression and anxiety amongst older people, suggesting that people with depression be encouraged to tell their own stories (especially those who have successfully treated their depression) and that these stories be given broad public airplay, preferably on television. One thought that residential aged care facilities were an important point of contact with older people.

"Get those with depression anxiety to speak to those concerned (including doctors and health professionals) with their story in a formal and controlled manner."

"Get those people who have had success with controlling depression/anxiety (past sufferers) to speak to doctors/sufferers."

"More publicity given to well-known people who have dealt with or are dealing with depression. This should be a national media initiative. The stories of every day Australians should be told too. After all, it is not only the well known who suffer but others as well. The public should be reminded that depression is an illness and as such needs public understanding and how sufferers can still play an important role in society."

Other suggestions for dissemination of information about depression and anxiety included GP surgeries; clubs, including service clubs, Probus and Rotary clubs; newspaper advertisements; and limited computer based media.

6.2.2 Role of GP and other health services

The GP had played an important role in recognising and treating or making appropriate referrals for four of the five respondents. The fifth said that he only had one visit to the GP and that neither the GP nor he had followed up. One respondent was receiving adequate treatment from his GP. *"My GP explained my problem and put me on anti-depressants. This has worked well for me..."*. Another had initially been diagnosed with depression by his GP but the GP had then referred him to a psychiatrist whom he had continued to see. Another described the GPs he had seen as helpful and sympathetic.

"GPs have been helpful and sympathetic. As a returned serviceman, I was first diagnosed in an air force medical centre. In my current relationship

with my GP, we talk about mental and physical health. He put me on medication and suggested exercise. He also sent me to a psychologist."

None of the respondents had used community services but one mentioned he had sought counselling from a private psychologist. They had had various treatments recommended to them including: diet and exercise; limiting alcohol consumption; electro convulsive therapy; and various medications. The treatments reported as most useful were medication (3), counselling (2), exercise (2), diet (1), alcohol control (1), and support of wife and psychiatrist (1). Two respondents had consulted a psychologist and one did not find it helpful. Only one person identified a barrier to treatment, which was the negative attitude of others towards recognising depression as a Workcover issue, including deliberate obstruction of his claim.

6.2.3 Knowledge and ideas regarding research

Only one of the five respondents had any knowledge of current research, citing the Queensland Institute of Medical Research for whom he had written a story about his experience. They all had ideas about the focus of future research including:

- Prevention (3);
- Nutrition (2);
- Physical activity (2);
- Technology (1);
- Therapy (1);
- Social programs (1);
- Identification, treatment of depression in residential aged care (1).

Many of the suggestions regarding dissemination and awareness raising described above were reiterated as ways to involve older people in research. There was a repeated proposal to get people who have had depression to tell their story. *"Again, get those who have suffered and beaten the condition to talk to researchers."*

Finally, most commented that they thought *beyondblue* should be doing research into depression and anxiety amongst older people (if they weren't already) but that they had insufficient knowledge of *beyondblue's* work in this area to make specific recommendations. One respondent identified older people in residential aged care as being particularly at risk of depression.

"As I am not aware of what beyondblue is doing in this area, I am not qualified to comment on this question. However, if beyondblue is not participating in depression/anxiety in older people I believe it would be appropriate for them to do so."

6.3 Summary

The consumer surveys reveal that General Practitioners are generally seen as helpful and are an important avenue for diagnosis, advice, treatment and referrals. Counselling was always seen as helpful but two respondents had found it beneficial. There are also some contradictory themes. Medication and exercise were seen as helpful by those using those treatments. The areas identified for further research are in line with those suggested by the literature and researcher surveys. In particular, alternatives to medication, including exercise and social programs were suggested as well as a focus on prevention.

7. Review of *beyondblue*'s Depression Monitor

7.1 Introduction

The Depression Monitor is a telephone survey tool developed by *beyondblue* to measure awareness, understanding and attitudes relating to depression and mental health. The survey was completed by people 18 years of age and older. Of the 50 items, the first 11 relate to general health and wellbeing, seven items seek demographic information, and the remaining 32 items concern depression, anxiety and bipolar disorder.

The sample data were collected between October 2007 and February 2008. *beyondblue* provided the NARI team with summary notes from the analysis of the data. In this analysis, the responses of people over 65 are compared with younger groups divided into 18-24 years; 25-34 years; 35-44 years; 45-54 years; and 55-64 years.

7.2 Findings from the Depression Monitor

The review of the *beyondblue* notes from the Depression Monitor identifies the key areas where there are distinct differences between the responses of older people and the other age groups. The main points of difference are:

- Older people's knowledge and personal experience of these conditions is limited. They are less likely to have lived with or had a family member with depression, or to have been exposed to stories about people with depression through literature, films or television;
- Older people are less likely to know about the lifetime prevalence of depression, less likely to think they might be personally touched by depression, and more likely to view Alzheimer's and dementia as a major mental health problem;
- Older people attach stigma to depression and anxiety, have less trust in people with severe depression and are unlikely to seek their company;
- Older people would go to their GP if they required professional help or information about depression, and are less likely to go to a counsellor or a psychologist as a first choice;
- Older people tend to rate antidepressant medication, exercise, counselling and psychotherapy less highly than younger groups, but believe talking and listening can be helpful. They are also more likely to think an occasional alcoholic drink would be helpful;
- Older people are more likely than younger groups to think people with severe depression will often get better without treatment, can often cope on their own, or should pull themselves together;
- Older people were far less likely to have felt 'hopeless' during the past 30 days, less likely to have heard of bipolar disorder, and less likely to be aware of organisations related to depression.

7.3 Summary

There are some themes emerging from Depression Monitor that are similar to those that emerged from the literature and the consumer surveys. There is clearly a stigma surrounding depression among older people and mental health literacy seems to be poor in this group. General Practitioners are often the first point of contact for older people seeking diagnosis, advice, and treatment on depression. However, some of the themes differ to some degree from the findings of the consumer survey. For example, in the Depression Monitor sample, although counselling was seen as helpful, it was not as highly regarded by older people as by younger groups. The same applies to other treatment options, such

as medication, psychotherapy and exercise. However, talking and listening were viewed as potentially helpful by the older group in this sample.

8. Conclusion and Recommendations

This project has investigated the scope of current Australian research into depression and anxiety in older people from a range of perspectives. The research literature has been searched, Australian researchers and older people with depression have been surveyed and a search of relevant websites has been conducted.

The literature review identified groups of older people most at risk of depression and anxiety, including older people in residential aged care, older people with multiple physical co-morbidities, older people with dementia, older people who are carers, older people in hospital, older women, older Indigenous people and older people from CALD backgrounds. This review summarised common screening tools and treatment approaches in late-life depression and anxiety. It also identified some barriers to treatment and management of late-life depression and anxiety, including low mental health literacy, ageism and lack of professionals specialised in late-life depression/anxiety. The review also found that older people with depression and anxiety have a much higher risk of suicide than the general population.

The literature review also identified some gaps in current research in late-life depression and anxiety.

Firstly, there is limited research in late-life anxiety compared to depression (although further research is required in both areas).

Secondly, in relation to diagnosis and screening tools, there are limited studies on:

- Validation of common screening tools in specific population groups, including older Indigenous people and older people from Culturally and Linguistically Diverse backgrounds;
- Prevalence of depression and anxiety in older people from Culturally and Linguistically Diverse backgrounds and older Indigenous people;
- Diagnosis of depression and anxiety among people with dementia;
- Training and support of early identification of depressive and anxiety disorders for primary care.

Finally, research in relation to treatment and management is limited regarding:

- The efficacy of psychological interventions in depression in later life;
- Multi-factorial intervention approaches in depression in later life;
- The efficacy of other approaches (e.g., behavioural) in treatment of late-life depression;
- Cultural factors which can influence the coping strategies older people use and their willingness to seek help;
- Lack of access to specialist services, particularly in rural and remote communities.

The researcher survey and review of websites revealed some common areas of research in this field, including:

- Risk factors and prevalence of late-life depression and anxiety;
- Efficacy of antidepressants in treatment of late-life depression;
- Depression and anxiety among particular subgroups of older people, including people living in residential aged care, with medical co-morbidities, living with dementia, carers, and people in rural areas.

Consistent with findings from the literature, there are also some gaps in current research on late-life depression and anxiety in Australia.

Firstly, there is little research regarding people with special needs, including older Indigenous people, older people from CALD backgrounds and people in rural and remote areas. Secondly, there is a need for more research into the role of primary health care in detecting and managing depression and anxiety. Thirdly, there seems to be less research in late-life anxiety compared to late-life depression. Finally, there is limited research on the efficacy of psychological approaches to treatment of late-life depression and anxiety.

The consumer surveys revealed that GPs are generally seen as helpful and are an important avenue for diagnosis, advice, treatment and referrals. Counselling was always seen as helpful; two respondents had found it beneficial. There are also some contradictory themes. Medication and exercise were seen as helpful by those using those treatments. The areas identified for further research are in line with those suggested by the literature and researcher surveys. In particular, alternatives to medication, including exercise and social programs were suggested as well as a focus on prevention.

There are some themes emerging from the Depression Monitor that are similar to those that emerged from the literature and the consumer surveys. There is clearly a stigma surrounding depression among older people and mental health literacy seems to be poor in this group. General Practitioners are often the first point of contact for older people seeking diagnosis, advice, and treatment on depression. However, some of the themes differ slightly from the findings of the consumer survey. For example, in the Depression Monitor sample, although counselling was seen as helpful, it was not as highly regarded by older people as by younger groups; the same applies to the other treatment options, such as medication, psychotherapy and exercise.

8.1 Summary

8.1.1 The literature review

1. Identified groups of older people most at risk of depression and anxiety:
 - Older people in residential aged care;
 - Older people with multiple physical co-morbidities;
 - Older people with dementia;
 - Older people who are carers;
 - Older people in hospital;
 - Older women;
 - Older Indigenous people;
 - Older people from CALD backgrounds.
2. Summarised common screening tools and treatment approaches in late-life depression and anxiety.
3. Identified some barriers to treatment and management of late-life depression and anxiety:
 - Low mental health literacy;
 - Ageism;
 - Lack of professionals specialised in late-life depression/anxiety.
4. Found that older people with depression and anxiety have a much higher risk of suicide than the general population.

5. Identified some gaps (or limitations) in current research in late-life depression and anxiety, including:
- Late-life anxiety compared to depression (although further research is required in both areas);
 - Validation of common screening tools in specific population groups, including older Indigenous people and older people from Culturally and Linguistically Diverse backgrounds;
 - Prevalence of depression and anxiety in older people from Culturally and Linguistically Diverse backgrounds and older Indigenous people;
 - Diagnosis of depression and anxiety among people with dementia;
 - Training and support of early identification of depressive and anxiety disorders for primary care;
 - The efficacy of psychological interventions in depression in later life;
 - Multi-factorial intervention approaches in depression in later life;
 - The efficacy of other approaches (e.g., behavioural) in treatment of late-life depression;
 - Cultural factors which can influence the coping strategies older people use and their willingness to seek help;
 - Lack of access to specialist services, particularly in rural and remote communities.

8.1.2 The researcher survey and review of websites

Areas of current research

- Risk factors and prevalence of late-life depression and anxiety;
- Efficacy of antidepressants in treatment of late-life depression;
- Depression and anxiety among particular subgroups of older people, including people living in residential aged care, with medical co-morbidities, living with dementia, carers, and people in rural areas.

Gaps in current research

- Little research of people with special needs, including older Indigenous people, older people from CALD backgrounds, carers and people in rural and remote areas;
- A need for more research into the role of primary health care in detecting and managing depression and anxiety;
- Currently less research in late-life anxiety compared to late-life depression;
- Limited research on the efficacy of psychological approaches to treatment of late-life depression and anxiety.

Suggestions for *beyondblue*

- Fund research in the areas identified as gaps above;
- Set up a national panel of experts to advise on research and practice directions for older age mental health;
- Establish mechanisms for multi-centre collaboration and data sharing, especially of existing longitudinal data;
- Develop national treatment guidelines for depression;

- Develop strategies for improving mental health literacy amongst older people – education campaign;
- Assist in the development of specialists in older age mental health research through funding scholarships.

8.1.3 The consumer surveys

- GPs are generally seen as helpful and are an important avenue for diagnosis, advice, treatment and referrals;
- Counselling was not always seen as helpful but two respondents had found it beneficial;
- Contradictory themes - medication and exercise were seen as helpful by those using those treatments;
- Suggestions for future research - alternatives to medication, including exercise and social programs; a focus on prevention.

8.1.4 Depression Monitor

Themes similar to the literature review and consumer survey:

- Stigma surrounding depression among older people;
- Lower levels of mental health literacy in this group;
- GPs often the first point of contact for older people seeking diagnosis, advice and treatment on depression.

Themes in contrast to findings of the consumer survey:

- Medication, counselling, psychotherapy and exercise not highly rated as helpful.

8.2 Recommendations for *beyondblue*

Older age depression and anxiety a priority

beyondblue to make older age depression and anxiety a priority in the next research funding round, specifically to fund research focusing on the following questions and groups.

- The groups who are most at risk and/or where there are gaps in knowledge are:
 - Older people from Culturally and Linguistically Diverse backgrounds;
 - Older people living in residential aged care;
 - Socially isolated older people living in the community, including those in receipt of community services;
 - Older Indigenous Australians;
 - Older people in rural and remote areas;
 - Older carers;
 - Older people with co-morbidities including physical illness, stroke and dementia;
 - Older women.
- The questions that should be the focus of this research are:

- Validity and reliability of existing diagnostic criteria for depression and anxiety in older people;
- Validity, reliability and appropriateness of existing screening and assessment tools for older people from CALD and Indigenous backgrounds;
- Efficacy of treatments for older people, including pharmacological, psychological and psycho-social;
- Efficacy of preventive health strategies for preventing and/or reducing symptoms of depression and anxiety in older people;
- Development and trial of service system interventions, particularly in primary care, such as:
 - Expanding the role of GPs in identification and treatment of depression and anxiety;
 - Considering the use of nurse practitioners;
 - Consideration of employing social workers in GP practices;
- Exploration of the potential application of E-Health technologies, particularly in rural and remote areas.

National advisory panel on older age mental health

beyondblue to establish a national advisory panel on older age mental health (see attached Terms of Reference and membership for NSW Advisory Group as an example). This could build on the initiative by Professor Osvaldo Almeida, commenced in March 2009, a network (Depression in Older Age Network) comprising psychogeriatricians, researchers, and other experts from around Australia with common interest in the field.

National awareness campaign

beyondblue to promote a national awareness campaign to improve mental health literacy amongst older people

Development of national guidelines

beyondblue to fund the development of national guidelines for identification and treatment of older age depression and anxiety. These could be developed using the process for development of NHMRC guidelines.

8.3 Concluding remarks

This project has investigated the scope of current Australian research into depression and anxiety in older people from a range of perspectives. The research literature has been searched, Australian researchers and older people with depression have been surveyed and a search of relevant websites has been conducted.

The key findings have been documented and a range of recommendations have been proposed for further action by *beyondblue*.

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