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5 **An overview of substance use and mental health among the Baby Boomer generation**  
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8 **Abstract**  
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11 As the population ages, risk factors commonly shared by chronic degenerative disease can be  
12 exacerbated by behaviours and lifestyle choices. There is increasing evidence that those  
13 affected by chronic disease (and associated symptoms such as pain), depression and adverse  
14 behavioral and lifestyle patterns are at risk of substance misuse. This paper overviews  
15 substance use in Baby Boomers - people aged between 52-70 years old, and the implications  
16 this may have on their mental health and well-being. We provide an overview of the  
17 characteristics of the Baby Boomer generation, their health status and what is currently  
18 known about their substance use and misuse. A strengthening of older adult mental health  
19 outpatient services is recommended to prevent and address substance use among older adults.  
20 Further research examining factors that influence substance use among this group could  
21 better inform health promotion programs targeting Baby Boomers.  
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39 **Key words**  
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42 alcohol, assessment, baby boomers, nursing, older adults, mental health, prescription  
43 medication, substance use/misuse  
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## Introduction

Ageing is a multidimensional construct, encompassing biological, psychological, social and cognitive risk factors. Increased life expectancy is but one of a myriad of consequences arising from medical and technological advances over the past two centuries. Whilst chronological life expectancy has increased, risk factors such as chronic illness, social isolation, dependence on substances such as drugs, alcohol and tobacco and mental health factors may have a profound influence on an individual's actual experience of biological ageing, and on many comorbidities (Moyle, Parker, & Bramble, 2014).

There are a number of factors that may lead older people to substance use and misuse, including physical and psychological health problems, and socio demographic characteristics (situations common to ageing such as retirement, loss of friends/spouse, loneliness, financial strain). Substance misuse affects millions of adults annually, and one in five are older adults (Morgan, Brosi, & Brosi, 2011). It is significant however, that substance misuse amongst older people has been under-identified for some decades (Kuerbis, Sacco, Blazer, & Moore, 2014). This paper overviews substance use in Baby Boomers - people aged between 52 and 70 years old, and the implications substance misuse may have on their mental health and well-being. We commence with an overview of the characteristics of the Baby Boomer generation, their health status and what is currently known about their substance use and misuse. Prescription drugs and alcohol are the two main substances of choice for older adults (Morgan et al., 2011; O'Malley, 2012). As such these will be used as examples to demonstrate substance misuse and the relationship between these and mental health issues. Strategies for early identification of substance misuse are identified together with the need for enhancement of older adult mental health services.

## The Baby Boomers – Ageing and Health Status

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3 The ageing population in developed countries is growing at an unprecedented rate (Morgan et  
4 al., 2011). This ageing or “greying” of the population presents significant health and social  
5 challenges for this century and the largest increase in the number of older adults is yet to  
6 come, but is imminent, as more Baby Boomers grow older (Adams-Price, Turner, & Warren,  
7 2015). Between 1946 and 1964, 78 million children (Baby Boomers) were born in the United  
8 States of America (US), and in 2010, Baby Boomers comprised approximately 26% of the  
9 US population (King, Matheson, Chirina, Shankar, & Broman-Fulks, 2013). In 2011, the  
10 oldest of the Baby Boomer cohort turn 65 years old and by the year 2030, the entire Baby  
11 Boomer generation will be 65 or older (Duncan, Nicholson, White, Bradley, & Bonaguro,  
12 2010). By 2030, it is estimated that the population over 65 years in the US will be twice as  
13 large as the number of individuals who turned 65 in 2000, (Snyder & Platt, 2013) reaching  
14 the 70 million mark (Bowman & Gerber, 2006b). One person out of every 5 Americans will  
15 be an older person (Bowman & Gerber, 2006a).

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32 With improved longevity and the ageing of large cohorts of Baby Boomers, projections  
33 globally are that the average age of the world’s older population will increase (United  
34 Nations Department of Economic and Social Affairs Population Division, 2015). Globally, in  
35 2015, one in eight people was aged 60 years or over and by 2030, older persons are forecast  
36 to account for one in six people globally (United Nations Department of Economic and Social  
37 Affairs Population Division, 2015). As a result the proportion of the world’s older persons  
38 who are aged 80 years or over is forecast to be more than 20 per cent by 2050 (United  
39 Nations Department of Economic and Social Affairs Population Division, 2015). This  
40 increase in life expectancy from 77.6 years in 2006 (Bowman & Gerber, 2006a) has been  
41 mainly due to advances in health, medical treatment and pharmaceuticals.. Whilst healthy  
42 ageing is a public health goal for older adults (Snyder & Platt, 2013), for many Baby  
43 Boomers, extended life expectancy is and will be a ‘double edged sword’, bringing with it  
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3 many potential years of financial, psychological and physical health concerns, which are not  
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5 necessarily ameliorated by levels of income and wealth (Adams-Price et al., 2015).  
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8 Evidence demonstrates mixed results as to whether Baby Boomers are actually healthier than  
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10 prior generations, with findings documenting poorer mental health status, increased rates of  
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12 obesity, hypertension, diabetes, and other conditions (King et al., 2013; Moyle et al., 2014).  
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14 Epidemiological studies provide evidence that with this increased longevity, the trend is  
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16 toward a greater number of older people living with chronic disease and disability (Cangelosi,  
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18 2011; Moyle et al., 2014; Snyder & Platt, 2013). Risk factors commonly shared by chronic  
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20 degenerative disease can be exacerbated by behaviours and lifestyle patterns such as lifetime  
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22 drug use, inadequate exercise, and poor nutrition (Australian Institute of Health and Welfare,  
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24 2014; O'Malley, 2012). Subsequently there is increasing evidence that those affected by  
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26 chronic disease (and associated symptoms such as pain and restricted movement), depression  
27  
28 and adverse behavioral and lifestyle patterns are at risk of substance misuse (King et al.,  
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30 2013; Morgan et al., 2011).  
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### 34 35 **Chronic disease and prescription drug use and misuse in older adults**

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37 Deteriorating physical health in older adults is most likely due to an increasing prevalence of  
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39 chronic conditions such as hypertension, rheumatoid arthritis, heart failure and diabetes, lung  
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41 disease, cancer and mood and anxiety disorders (Gerteis et al., 2014; Rosen, Smith, &  
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43 Reynolds, 2008). In America, 80% of people aged 65years and over suffer from multiple  
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45 chronic conditions (Gerteis et al., 2014). For adults aged 50 and over managing chronic pain  
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47 associated with conditions such as arthritis or cancer is identified as the most common health  
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49 concern needing prescription drugs and over the counter drug use (Snyder & Platt, 2013).  
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51 Inappropriate use of prescription drugs impacts up to 23.5% of older adults living in the  
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53 community (Bowman & Gerber, 2006a).  
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3 This drug misuse may not be intentional, but may be associated with multiple conditions  
4 requiring multiple prescriptions (Morgan et al., 2011), and may lead to dependency, with  
5 unsafe combinations and amounts of drugs being used (Culberson & Ziska, 2008).  
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7 Polypharmacy also increases the risk of dangerous drug interactions and potential misuse,  
8 particularly among those taking medications to treat anxiety, pain, and insomnia as the nature  
9 of the medications used to treat these conditions increases the risk of dependency (Bowman  
10 & Gerber, 2006a; O'Malley, 2012). However, the individual is less likely to identify as a  
11 misusing or abusing a substance if the drug has a prescription (O'Malley, 2012).  
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21 It should be noted that women are more likely to be prescribed medications that have an  
22 increased abuse potential (Morgan et al., 2011). This may be because women are more likely  
23 to report having multiple chronic health issues than men (Gerteis et al., 2014) and visit their  
24 doctors more frequently. In addition, stereotypical views about women and their presenting  
25 symptoms may influence the treating doctor's approach as has occurred in studies of patients  
26 with heart disease whereby they "are more likely to tune into psychological cues and to  
27 search for psychological explanations for women's symptoms" than men (Adams et al., 2008,  
28 p. 10).  
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39 Increased prescribing of opioids for pain may also be a major reason for the increasing  
40 prevalence of opioid tolerance, dependency and addiction, and the parallel increase in  
41 morbidity and mortality associated with opioid misuse (Kolodny et al., 2015). For older  
42 adults, data show that mixing alcohol, prescription drugs and over-the-counter medication is  
43 particularly risky behaviour and may heighten the effects of each (Bowman & Gerber,  
44 2006a; Kuerbis et al., 2014). Similarly, when alcohol and medications are used concurrently  
45 to reduce insomnia, sedation and cross tolerance may result (Morgan et al., 2011). Evidence  
46 suggests that the prevalence of drug abuse among the baby boomers is expected to increase  
47 by 2020 (Colliver, Compton, Gfroerer, & Condon, 2006) with the bulk of abuse expected to  
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3 involve over-the-counter and prescription drugs (Bacharach, Bamberger, Sonnenstuhl, &  
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Vashdi, 2008).

### **The Baby Boomers – Substance Use and Misuse**

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Substance use can range from occasional use that may not be harmful to more frequent use that may lead to harm and addiction (Athanasos, 2016). Generally, the more frequent use of the substance and the greater the amount used, the greater is the risk of dependence and the more severe the consequences to physical and psychosocial health (Athanasos, 2016). The DSM-5 does not use the terms ‘dependence’, ‘addiction’ or ‘substance abuse’ as these terms can be very confusing and judgemental. Rather, the DSM-5 prefers “substance use disorder” (referring to drugs or alcohol) and then determines the severity of the disorder by the number of symptoms present (American Psychiatric Association, 2013; Athanasos, 2016). Assessing the multifactorial risk factors for addiction, dependence and misuse in Baby Boomers is important as these may not only be related to increasing age but also to gender, social isolation, depression, loneliness, comorbidities, cognitive problems, previous and family history of drug and alcohol abuse/dependence/misuse (Blow & Barry, 2012).

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Baby Boomers, are more accepting of drug use generally than earlier generations (Cangelosi, 2011). There are increased rates of lifetime drug use reported for both illicit and prescription drugs among the Baby Boomer generation, and given the size of this group and the impacts of chronic illness, rates are expected to increase (Colliver et al., 2006; Wu & Blazer, 2011). A forecast report for 2020 found that in the US, 3.3. million Baby Boomers are expected to be using marijuana, 2.7 million using psychotherapeutic drugs and 3.5 million will carry on concealing their illicit-drug use (O’Malley, 2012). In the US the Baby Boomer cohort also contains a historically high number of people who are already drug dependent and estimates are that the number of adults aged 50 and older with substance misuse problems will increase

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3 to 5.7 million in 2020. (Grella & Lovinger, 2012). It is projected that this long term  
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5 dependency will be associated with unprecedented levels of substance use disorders,  
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7 associated health problems, and the need for treatment among this cohort (Grella & Lovinger,  
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9 2012). Research suggests that the number of adults in the US aged 50 or over who need  
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11 treatment for a substance abuse problem will rise to about 4.4 million by 2020 (Gfroerer,  
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13 Penne, Pemberton, & Folsom, 2003).

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17 Documented higher rates of heavy alcohol use are noted among Baby Boomers than in earlier  
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19 and smaller cohorts of older adults (Gfroerer et al., 2003). Amongst this generation, alcohol is  
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21 one of the commonly used substances as it is socially acceptable, legal, affordable, readily  
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23 available and not usually scrutinized (Bowman & Gerber, 2006a; Kuerbis et al., 2014;  
24  
25 Salmon & Forester, 2012). However alcohol use and misuse in older people may be  
26  
27 associated with other factors such as loneliness, isolation and loss of connection, stress, pain,  
28  
29 and anxiety (Moyle et al., 2014). Often mental health disorders, such as depression, can co-  
30  
31 occur with alcohol disorders in older adults (Bowman & Gerber, 2006a). This group is also at  
32  
33 higher risk of drug interactions, depression, diabetes, memory impairment and sleep problems  
34  
35 as a consequence of their alcohol intake (Blow & Barry, 2012). Older adults who misuse or  
36  
37 abuse alcohol were also found to have higher use of marijuana, other illicit drug and tobacco  
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39 use (Choi, DiNitto, Marti, & Choi, 2016) and are at greater risk of accidents and death  
40  
41 (Morgan et al., 2011).

#### 42 43 44 45 46 **Associations between substance abuse and mental health disorders**

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49 The mental health needs of the Baby Boomer cohort has been a concern for several decades,  
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51 given their use of alcohol and that many on the verge of retirement are in poor health  
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53 reporting increased pain and chronic conditions, as well as psychiatric problems (Maust,  
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55 Kales, & Blow). With the reported higher rates of drug and alcohol use/misuse it is expected  
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3 that comorbid substance use disorders (SUDs) and mental health disorders will be a  
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5 significant issue of concern among Baby Boomers (Choi, DiNitto, & Marti, 2015; Kerfoot,  
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7 Petrakis, & Rosenheck, 2011). Depression, sleep disturbance, and anxiety are reported to be  
8  
9 the most common psychiatric symptoms among older adults (Salmon & Forester, 2012). By  
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11 the year 2030, the number of older adults in America with major psychiatric disorders is  
12  
13 forecast to increase to 15 million (Stephen J. Bartels, 2006). These disorders may be long-  
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15 standing or may have developed in response to late-life stressors and/or changes associated  
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17 with the ageing brain (Salmon & Forester, 2012).  
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21 The high rate of SUDs and mental health disorders (MHDs) is well documented in the adult  
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23 population (Horsfall, Cleary, Hunt, & Walter, 2009; Hunt, Malhi, Cleary, Lai, & Sitharthan,  
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25 2016; Hunt, Siegfried, Morley, Sitharthan, & Cleary, 2013; Lai, Cleary, Sitharthan, & Hunt,  
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27 2015). People with MHDs are more likely to have substance-related problems than those  
28  
29 without MHDs (Green, Yarborough, Polen, Janoff, & Yarborough, 2015). Substance abuse  
30  
31 has been found to be closely associated with stressful and traumatic life events and those who  
32  
33 experienced rejection and isolation from society because of their mental health problems  
34  
35 (Chorlton & Smith, 2016). The co-occurrence of mental illness with SUDs is also associated  
36  
37 with vulnerability to premature death, and shortened life expectancy (Kerfoot et al., 2011).  
38  
39 Furthermore adults with MHDs have more disability than people with only a physical illness,  
40  
41 in addition to poorer health outcomes and higher rates of hospitalization (Bartels & Naslund  
42  
43 2013).  
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48 The common co-occurrence of SUDs in people diagnosed with a bipolar disorder, and mood  
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50 and anxiety disorders is noted (Hunt, Malhi, Cleary, Lai, & Sitharthan, 2016; Hunt et al.,  
51  
52 2016; Lai et al., 2015; Salmon & Forester, 2012) Research highlights not only the high  
53  
54 prevalence of comorbid substance abuse and mental disorders in older adults, but also  
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56 increased suicidality and higher service utilization, in both inpatient and community samples  
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3 (Bartels, Blow, Van Citters, & Brockmann, 2006; Kerfoot et al., 2011; Regier et al., 1988).

4  
5 Despite the predicted growth of older adults with co-occurring mental illness and substance  
6  
7 use disorders in the coming decades this cohort remains relatively under researched. Much of  
8  
9 the research regarding comorbid SUDs and MHDs is limited to younger adults. Those that  
10  
11 address older people tend to focus on particular older populations such as a study examining  
12  
13 prevalence rates of comorbid substance use and mental health disorders in the older Veteran  
14  
15 population. (Searby, Maude, & McGrath, 2015).  
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### 18 19 **Implications for Service Providers**

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22 The current healthcare system needs to be prepared to meet the increased demand for health  
23  
24 services for Baby Boomers with comorbid mental health and substance use disorders (Bartels  
25  
26 & Naslund 2013; O'Malley, 2012; Searby et al., 2015). As the Baby Boomer generation  
27  
28 continues to age, mental health services and resources will in all likelihood be stretched  
29  
30 (Searby et al., 2015). Community collaborations; a strengthening of outpatient services; and a  
31  
32 focus on health, prevention, and education are recommended to address this shortfall  
33  
34 (Cangelosi, 2011). Understanding when and why baby Boomers begin substance abuse and  
35  
36 the long term health impacts is essential to better understand their needs and ensure these are  
37  
38 met (Kerfoot et al., 2011; O'Malley, 2012; Rosen et al., 2013; Salmon & Forester, 2012).  
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43 The standard diagnostic criteria for abuse/dependence may not appropriately encompass older  
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45 people with problematic patterns of use, and can be difficult to apply to older adults in the  
46  
47 context of comorbid medical illnesses and other cognitive changes associated with poly  
48  
49 pharmacy and aging (Blow & Barry, 2012; Kerfoot et al., 2011; Salmon & Forester, 2012).  
50  
51 Sleep problems and confusion which may be attributed to aging in older adults may also be  
52  
53 signs of substance misuse (O'Malley, 2012). Alcohol misuse can also mimic symptoms of  
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55 normal aging processes and exacerbate others, such as mental health concerns about anxiety  
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3 and depression (Bowman & Gerber, 2006a). This complexity may contribute to potentially  
4  
5 serious problems being overlooked and under-reported.  
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8 Screening and decisions regarding interventions and treatment should focus on the complex  
9  
10 interplay of risk factors and comorbidities for misuse, not just on levels of use (Blow &  
11  
12 Barry, 2012). There are a number of screening tools intended for older people that may aid  
13  
14 detection of substance use problems that explore the relationship between substance use and  
15  
16 worsening health, medication use, and functional status (Kerfoot et al., 2011). Further, issues  
17  
18 related to stigma and discomfort associated with providing a diagnosis may also arise  
19  
20 (Kerfoot et al., 2011; Kuerbis et al., 2014). Baby Boomers themselves may hold strong,  
21  
22 entrenched beliefs about the need for treatment and health professionals need to ensure that  
23  
24 the person feels safe disclosing information that could be viewed negatively or perceived to  
25  
26 demonstrate bad or weak character. It is therefore important to focus the person on getting the  
27  
28 help needed (Morgan et al., 2011) and addressing the specific susceptibilities and needs of the  
29  
30 person (for example grief, isolation, feeling productive) (Bowman & Gerber, 2006b). Failure  
31  
32 to screen represents a missed opportunity given many of these older adults will be receiving  
33  
34 regular treatment for chronic diseases (Duncan et al., 2010). Through effective screening  
35  
36 strategies, older adults with comorbid substance abuse and mental disorders can be identified  
37  
38 and assisted to access relevant substance use and mental health treatment (Choi et al., 2015).  
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44 Research on addressing the socio-economic factors contributing to substance abuse and  
45  
46 evaluating the effectiveness of educational and health promoting programs or interventions  
47  
48 are also needed (Deren & Tross, 2015). In addition research is required on how to integrate  
49  
50 routine screening across settings, the effectiveness of specific treatment interventions, and  
51  
52 examination of vulnerabilities to increased risk for substance abuse. These are among some  
53  
54 of the suggestions to develop an evidence base to support clearer recommendations for both  
55  
56 psychosocial interventions and effective and safe pharmacotherapy approaches (Salmon &  
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3 Forester, 2012). There is a need both to develop evidence based practice for comorbid mental  
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5 health and substance use disorders as well as to implement effective and responsive  
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7 community models of service delivery (Kerfoot et al., 2011). Choi et al. (2016) also  
8  
9 suggested that research is needed to examine the genetic, lifestyle, environmental, cultural,  
10  
11 religious and socio-demographic factors that influence substance use.  
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### 14 **Conclusion**

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18 As the Baby Boomer generation ages, risk factors commonly shared by chronic degenerative  
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20 disease can be exacerbated by behaviours and lifestyle patterns including substance misuse.  
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22 Nurses are well positioned to assess older persons' health status including strengths and risks  
23  
24 and alert to recognising substance misuse and harnessing appropriate interventions. It is  
25  
26 expected that the ageing Baby Boomer generation will increase the pressure on health  
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28 services providers as increased numbers of older adults with substance related issues require  
29  
30 care and support (Searby et al., 2015). Further research is needed around mental health and  
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32 substance use disorders to develop age specific cost-effective strategies to support current and  
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34 predicted demand for healthcare services.  
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