

Depression in Late Life and Dementia
David Bradley, Geriatric Fellow
Washington University School of Medicine

Depression is not uncommon in late life. Depression is NOT a sign of weakness or a character flaw and can happen to anyone, at any age, no matter the individual's background or previous accomplishments in life. Life changes such as retirement, the passing of loved ones, increased social isolation, and medical problem can certainly lead to a low mood and clinical depression. Its ramifications, however, frequently extend far beyond the notion of a low mood. Depression may include a negative impact on energy level, sleep, appetite, and physical health. Other symptoms that suggest a possible depression include: a pervasive sense of guilt, slow speech and body movements, seeing or hearing things that aren't there such as hallucinations, feelings of hopelessness or worthlessness and thoughts of suicide or a preoccupation with dying. The symptoms of depression may impact interpersonal relationships.

Depression and dementia can share similar symptoms and signs, including memory problems, slow speech and movements, and lack of motivation or withdrawal from enjoyable activities. It is often difficult to distinguish between the two diagnoses and they often can coexist in the same individual. Depression, in itself, typically manifests as a more rapid mental decline with preservation of orientation and difficulty concentrating, while dementia often follows a slower and progressive mental decline with confusion, disorientation and problems with short-term memory. However, differentiating the early signs of dementia from that of depression remains a challenge for the individual, family and loved ones, and the health care team.

Depression and dementia share a complex relationship, with a possible biological link being present between the two disorders. In fact, in a recently published report in the Archives of General Psychiatry, individuals who had symptoms of depression in middle age were about 20% more likely to go on to develop dementia and those who received a depression diagnosis later in life had about a 70% increased risk of developing dementia. Depression is associated with neuronal and hormonal changes similar to those observed in animal models of chronic stress, which have known detrimental effects on the hippocampus, the area of the brain responsible for memory function.

Human studies in older adults, likewise, suggest that hippocampal size and function are diminished in the setting of these stress-related hormonal changes. Neuroimaging studies have generally shown reduced hippocampal volumes in late-life depression subjects relative to age-matched controls. Furthermore, many studies have found a significant association between hippocampal atrophy and greater lifetime duration of depression.

Studies have also consistently shown an increased prevalence of depression in patients already suffering from dementia. As many as one-quarter to one-half of dementia patients are likely to experience clinical depression during the course of their illness. However, the onset of depressive symptoms is often misinterpreted as worsening of cognitive decline. Hence, it often remains under-diagnosed. The lack of a coherent history from the patient, frequent overlap of symptoms, and the lack of acumen on the part of physicians may enhance this diagnostic difficulty. Undetected depression adds to disability and caregiver burden. Therefore, all individuals with dementia should be routinely screened for depression and managed accordingly.

Early recognition and proper intervention will likely improve numerous patient outcomes including quality of life, increase socialization and stable eating and sleep patterns. Use of selective serotonin reuptake inhibitors, such as sertraline and citalopram (or other appropriate antidepressants), are likely to benefit the patient. Certain behavioral interventions (i.e. involvement of the patient in physical activity, counseling in the early stages of the disease) have also been found to be useful. In severe cases of depression, electroconvulsive therapy (ECT) has been shown to improve depression in

select dementia patients. ECT has been found to be a safe and efficacious procedure even in frail older adults.

In summary, depression and dementia share a complex interrelationship that often provides a clinical challenge for diagnosis and management. Vigilance on the part of family members and health care professionals to monitor for signs and symptoms of depression can lead to quicker treatment and ultimately improved patient outcomes.