



## Mental Health in Late Life and the Risk of Dementia

Depression in late life is associated with an increased risk of dementia.<sup>1</sup> Elderly with depression are more prone to diabetes,<sup>2</sup> cardiovascular and cerebrovascular disease, which are known risk factors of vascular dementia and Alzheimer's disease.<sup>3,4</sup> Compared to the elderly without depression, they are more likely to have poorer general health.<sup>4</sup> A study estimated the risk for them to develop dementia to be twofold.<sup>5</sup>

Apart from depression, studies have found that anxiety might also contribute to dementia risk. A Swedish twin study followed 1,082 people aged 50 or above from 1984 to 2012, and identified anxiety symptom as a risk factor for developing dementia.<sup>6</sup> It was speculated that anxiety might cause chronic stress, which in turn damaged the hippocampus and pre-frontal cortex that was responsible for memory and executive function respectively. Another study<sup>7</sup> that involved older adults without dementia reported that higher level of anxiety was associated with a larger extent of the decline in episodic and verbal memory over a three-year follow-up period of time. Researchers pointed out that anxiety symptoms might disturb hormone release, divert attention to fear and threats information, hence affect the hippocampal function and language performance.

The association between depression and anxiety and the risk of dementia underlines the importance for the elderly to maintain psychological well-being. However, elderly may find this difficult because of factors such as chronic pain,<sup>8</sup> financial strain,<sup>9</sup> and limitations from the living environment.<sup>10</sup> Cerin et al<sup>10</sup>, in particular, pointed out that several urban environmental characteristics in Hong Kong, including crowdedness, air and noise pollution, and the lack of green and open space in some neighborhood might lead to poor quality of life. A local community screening<sup>11</sup> reported that 8.3% of people aged 65 or over in Hong Kong had clinically significant depression, while the prevalence of anxiety disorders of Hong Kong people aged between 60 and 75 was estimated to be 8%<sup>12</sup>; mental health issue of elderly in Hong Kong should be well addressed in order to facilitate them to live in the community in good physical and psychological health.

Mindfulness-based activities such as mindful yoga and body-scan meditation<sup>13</sup> promote the quality of awareness by attending to breath, thoughts, bodily sensations, and everyday activities, with the aim of directing one's attention to the present experience in a non-judgmental way.<sup>14</sup> It has been demonstrated to lessen stress, depression and anxiety in non-clinical population,<sup>15</sup> and reduce the symptom severity in people diagnosed with



depressive disorder.<sup>16</sup> In the context of dementia, Katz et al.<sup>17</sup> recommended mindfulness-based practice to prevent cognitive decline given that stress was a modifiable risk factor of mild cognitive impairment in the elderly. Through mindfulness practice older adults might be able to develop self-compassion, resilience,<sup>18</sup> and psychological flexibility<sup>13</sup> to accept unpleasant emotions with a positive self-attitude, and therefore be more capable of dealing with ongoing challenges in life as well as reducing the risk of cognitive decline.

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