# Anxiety in older adults

# Valorisation addendum

In this thesis anxiety in older adults is studied. This thesis is of interest of researchers, but also for clinicians and the general population. As anxiety disorders are the most common psychiatric disorders in older adults and as subsyndromal anxiety is even more prevalent than anxiety disorders, it is important to study this highly prevalent complaint. In general there is relative little research done about anxiety compared to the bulk of research about depression in older adults. This thesis tries to fill this gap of research by examining anxiety in later life from a lifespan perspective. It contributes conceptually, theoretically and practically to the knowledge about anxiety in older adults.

As mentioned before anxiety in older adults is often not recognized, partly because anxiety complaints, especially avoidance behavior, in older adults are more accepted in the society.(Farabaugh et al., 2012) It is important to accomplish awareness in the general population that anxiety in older adults can be problematic and that effective treatments are available. There needs to be awareness that next to pharmacotherapy, also psychological treatments are effective in older adults. Age is not an exclusion criterion for treatment of anxiety. Awareness that anxiety is a risk factor for cognitive impairment or dementia can result in patients sooner reporting their complaints to their clinician. It is important to discuss anxiety as older adults often do not feel comfortable discussing their mental health due to the stigma. The dialogue about the high prevalent anxiety complaints in older adults can diminish this stigma.

The valorization of each individual study is written in more detail below.

**Chapter 2** shows that anxiety in the general population is a risk factor for cognitive impairment and probably for dementia. Anxiety does not predict conversion from mild cognitive impairment to dementia in clinical samples, for example patients visiting the memory clinic. Anxiety could be a prodromal symptom of dementia, caused by an unknown third factor also causing the dementia, or a causal factor itself. Irrespective of the association is causal or not, it is important for the clinician to be aware of anxiety as a possible predictor for dementia, especially when the anxiety emerges at late life. Late-life anxiety disorders have a low incidence rate, since 95$^{th}$ percentile of all anxiety complaints have already been exposed at the age of 51 years and 99$^{th}$ percentile at 65 years.(Kessler et al., 2005a) When patients present themselves with anxiety, treatment should be started.

Anxiety in the presence of an underlying neurodegenerative process will possibly respond better to the structuring of daily life instead of cognitive behavioural therapy. Exposure in vivo could potentially increase the anxiety complaints. However, a systematic review and meta-analysis showed that psychological treatments, like cognitive-behavioral therapy or interpersonal therapy, are effective for anxiety and depression in patients with cognitive problems, even with dementia.(Orgeta et al., 2015) When causally related, adequate treatment of anxiety could lower the risk for developing cognitive impairment or dementia. Regular treatment steps should then be applied with for example cognitive behavioral therapy as a recommended first treatment step.

**Chapter 3** shows in a cross-sectional study that younger and older adults who suffer from any anxiety disorder perform worse on the figural fluency task, as a measure of executive functioning, compared to those not suffering from an anxiety disorder. This association is driven by agoraphobia, and is not dependent on age. Clinicians should know that problems specifically with executive functioning can interfere with treatment for affective disorders. (Alexopoulos, 2005, Mohlman, 2005) Other treatment strategies, like problem-solving therapy, showed better improvement in persons with executive dysfunction and depression. (Alexopoulos et al., 2008) Since the effect sizes in our study were small, regular treatment for anxiety should not be adapted in advance. However, when regular treatment fails it could be relevant to test executive functioning and when executive dysfunctions are present to adapt the treatment to it.

**Chapter 4** shows in a longitudinal study that anxiety symptoms predict decline in executive functioning over time in women, and decline in verbal memory in the older age group (65+ years). Women often have a higher prevalence of anxiety complaints, a more severe, and more chronic anxiety phenotype, compared to men.(Kessler et al., 2005b, Yonkers et al., 2003, de Beurs et al., 2000) Whether late-life anxiety could be prodromal or causally related to neurodegeneration remains unclear. Adequate treatment of anxiety symptoms could potentially beneficially influence the risk for developing neurodegenerative disease.

**Chapter 5** states that meaningful remission for a patient with depression consists of remission of the depression as well as the remission of the highly prevalent comorbid anxiety symptoms. Amongst other things, the severity of anxiety symptomatology and the presence of a comorbid anxiety disorder had a negative impact on the complete remission rates, with complete remission defined as no depressive and no anxiety disorder at follow-up. This highlights the importance of adequately diagnosing comorbid anxiety also in the presence of a depressive disorder. Also personality features influenced the complete remission rates, as high neuroticism was associated with non-remission, as was low mastery in the presence of childhood trauma. Clinicians should be aware of comorbid personality pathology when the anxiety complaints are chronic or have high relapse rates.(Pollack et al., 1992, Green and Curtis, 1988)The course of the comorbid anxiety symptoms during the two year follow-up was dependent upon these personality features (high neuroticism and low mastery), but only in the presence of negative life events. As personality features have an influence on the course of comorbid anxiety symptoms in depressive disorder and on non-remission rates, it is important to consider psychotherapy for older adults. Multiple meta-analyses have demonstrated the effectiveness of psychotherapy in older adults with anxiety disorders. (Gould et al., 2012, Goncalves and Byrne, 2012) That older adults are less opportune for psychotherapy as complaints are often more chronic, or the assumption that older adults are too inflexible to change their behavior, appears to be untrue. When personality features like high neuroticism or low mastery are present, psychotherapeutic interventions should not per se aim for complete remission of the personality dysfunction, but more the increase

of adaptive coping strategies, while diminishing maladaptive behaviors and symptoms (for example avoidance behavior in patients with anxiety complaints).(Morse and Lynch, 2000)

**Chapter 6** studies the influence of comorbid personality pathology on CBT outcome in younger and older adults with panic disorder with agoraphobia. Chapter 6 shows that only cluster B personality features has a detrimental effect on treatment outcome with CBT. The impact of personality pathology on treatment outcome is not dependent on age. Chapter 6 also studies whether personality pathology has a differential impact on evidence-based treatment modalities for panic disorder in later life (i.e. SSRI versus CBT). Older adults with comorbid personality pathology being treated with Paroxetine, did not improve as much as older adults without comorbid personality pathology. Comorbid personality pathology has no negative effect on the treatment outcome with CBT.

Patients with panic disorder should not be excluded for manual-based CBT based on age or personality pathology. Our finding that treatment with CBT is superior to pharmacotherapy in older adults with comorbid personality pathology, strengthens the recommendation in guidelines to offer primarily CBT for the treatment of panic disorder.(Instituut, 2013) In guidelines a combination of CBT and SSRI is suggested when treatment with CBT fails or when the panic disorder is severe.(Instituut, 2013) We advise to follow these guidelines, also in the presence of comorbid personality pathology.

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