

## Anxiety disorders: a review of current literature

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### Abstract

*Anxiety disorders are the most prevalent psychiatric disorders. There is a high comorbidity between anxiety (especially generalized anxiety disorders or panic disorders) and depressive disorders or between anxiety disorders, which renders treatment more complex. Current guidelines do not recommend benzodiazepines as first-line treatments due to their potential side effects. Selective serotonin reuptake inhibitors and selective serotonin norepinephrine reuptake inhibitors are recommended as first-line treatments. Psychotherapy, in association with pharmacotherapy, is associated with better efficacy. Finally, a bio-psycho-social model is hypothesized in anxiety disorders.*

**Keywords:** anxiety; epidemiology; genetics; environmental factor

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Anxiety disorders are the most prevalent psychiatric disorders (with a current worldwide prevalence of 7.3% [4.8%-10.9%]—Stein et al, in this issue p 127). Among them, specific phobias are the most common, with a prevalence of 10.3%, then panic disorder (with or without agoraphobia) is the next most common with a prevalence of 6.0%, followed by social phobia (2.7%) and generalized anxiety disorder (2.2%). Evidence is lacking as to whether these disorders have become more prevalent in recent decades. Generally speaking, women are more prone to develop emotional disorders with an onset at adolescence; they are 1.5 to 2 times more likely than men to have an anxiety disorder (Bandelow et al, in this issue p 93).<sup>1,2</sup>

There is a high comorbidity between anxiety (especially generalized anxiety disorders or panic disorders) and de-

pressive disorders. Additionally, anxiety disorders are often associated, which renders treatment even more complex for nonspecialists. As a result, anxiety disorders often remain underdiagnosed and undertreated in primary care.<sup>3</sup>

Both psychotherapy and pharmacotherapy have been shown to be more effective than placebo or waiting lists in the treatment of anxiety disorders. In a meta-analysis published in 2015 by Bandelow et al, and based on 234 randomized controlled studies, medications were associated with a significantly higher average pre-post effect size (Cohen's  $d=2.02$ ) than psychotherapies ( $d=1.22$ ;  $P<0.0001$ ); somehow, patients included in psychotherapy studies were less severely ill.<sup>4</sup> This meta-analysis also showed that psychotherapy in association with pharmacotherapy had a relatively high effect size ( $d=2.12$ ). Due to their good benefit/risk balance, selective serotonin reuptake inhibitors and selective serotonin norepinephrine reuptake inhibitors were recommended as first-line treatments. Current guidelines do not recommend benzodiazepines as first-line treatments due to their potential side effects. In fact, Parsaik et al, in a 2016 meta-analysis,<sup>5</sup> have reported a higher mortality rate among benzodiazepines users compared with nonusers. Underlying mechanisms need to be further studied. In addition, the development of tolerance and an increased risk for dependence were also reported in association with long-term use of benzodiazepine (which generally means  $\geq 6$  months). An increased risk of dementia was also claimed by several authors in long-term benzodiazepine users (pooled adjusted risk ratio for dementia of 1.55) compared with never users (for review, see ref 6). Finally, benzodiazepines do not treat depression, which is a common comorbid condition in anxiety disorders, and benzodiazepines may be associated with a higher suicide risk in case of comorbidity between anxiety and depressive disorders.<sup>7</sup>

The current conceptualization of the etiology of anxiety disorders includes an interaction of psychosocial factors such as childhood adversity or stressful events, and a genetic vulnerability. Until now, there are few biomarkers available.<sup>4</sup> Domschke et al (in this issue, p 159) will summarize recent data about the genetic factors involved in anxiety disorders. The serotonergic and catecholaminergic systems, and neurotrophic signaling, are promising candidate genes in generalized anxiety disorders, even if the genetic risk remains moderate (heritability of approximately 30%). In addition, gene–environment studies have highlighted the importance of early developmental trauma and recent stressful



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life events in interaction with molecular plasticity markers. Among socio-environmental factors, parenting behavior may also play a role in the prevention of anxiety disorders (Aktar et al, in this issue p 137). □

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