

# Anxiety problem with various treatments including cognitive behavioral therapy (CBT) and attention bias modification (ABM)

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## Abstract

From medical and social points of view, anxiety has been one of the crucial problems. Some associations or guidelines have been involved in this matter, including American Psychological Association (APA), US Preventive Services Task Force (USPSTF), Diagnostic and Statistical Manual of Mental Disorders (DSM-5), and others. Several treatments have been applied in clinically actual situations, such as cognitive behavioral therapy (CBT), acceptance commitment therapy (ACT), cognitive bias modification (CBM), attention bias modification (ABM), approach or avoidance training, and so on. Clinical efficacy of these various interventions for depressive and anxious status will become useful reference in the future.

**Keywords:** Anxiety; US Preventive Services Task Force (USPSTF); Cognitive Behavioral Therapy (CBT); Acceptance Commitment Therapy (ACT); Cognitive Bias Modification (CBM); Attention Bias Modification (ABM)

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## Commentary

The influence of COVID-19 has spread all over the world [1]. Several types of lockdowns for COVID-19 have begun in many cities worldwide. From a social point of view, adults at work, children in normal school life, all people, both individually and at home, are subject to all sorts of restrictions on their behaviors [2]. These cause various social unrest. According to a survey by the American Psychological Association (APA), most adults report that COVID-19 is causing significant stressful events in their lives on a daily basis [3].

Anxious social issues are also influenced by climate changes [4]. In a recent report, approximately 60% of young people felt insecure for daily lives, according to a survey in the Lancet. Furthermore, there have been lots of school shootings observed in the United States as unreasonable incidents. Based on a survey by the view research center, about 60% of parents and teenagers feel anxious for current society [5]. The on-going economic situation has been also huge source of stressors for various people. Deeply related to this would be the Russian invasion of Ukraine, which causes a variety of stresses for many adults.

The US Preventive Services Task Force (USPSTF) is an independent agency of the United States government and consists of primary care and preventive medicine experts. A key screening method was announced in Sept 2022 [6]. By utilizing

this, all people under the age of 65 can be screened for anxiety disorders conveniently.

In recent years, there have been mental health concerns about world-class athletes such as tennis star Naomi Osaka and gymnast Simone Biles. Some research have revealed that parenting style is closely related to child-rearing anxiety, although genetic factors also exist for familial-onset anxiety [7]. If the parents help their child deal with the factors adequately that make him anxious, he will gradually become better at coping with various matters. By no means, anti-anxiety drugs are not recommended or so clinically effective, and it is better not to use them.

For primary care physicians, we ask patients about the five factors of diet, exercise, sleep, alcohol, and smoking [8]. Everyone has own anxiety in the heart. In the future, medical doctors may always check for anxiety situation as the 6<sup>th</sup> factor. The perspective of the anxiety includes working, meeting with people, interrelationship and tension in ordinary daily life. On the other hand, there is situation associated with excessive anxiety. According to the latest 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), anxiety disorder has been characterized for its excessive anxiety and worry, which is often lasting more than 6 months [9]. In the guideline of the USPSTF, the category of anxiety includes seven types. Results from the USPSTF show that two out of three people with depression have an anxiety disorder [10] As a related interview manual, the manual developed by Barlow is used [11]. Subsequently, Silverman published appropriate manuals and

How an anxious child grows up depends greatly on how their parents raise them [13]. It would be effective for children simply to enter to nursery schools and kindergartens. If parents help their children excessively, the children's anxiety will tend to increase in the future, and they will not acquire problem-solving skills [14]. Anxiety has been usually produced by avoidance behavior [15]. Therefore, once a child overcomes avoidance behavior and confronts its causes, it is thought that anxiety usually disappears during growing-up. These standard treatments include cognitive behavioral therapy (CBT). It has been found to be most effective for relieving anxiety [16]. The method first reveals the irrational and unproductive preferences and beliefs that underlie the symptoms. Then, the case was advised for overcoming it and changing the associated behavior little by little. About CBT performance, about 60-70% of young people's anxiety disappears in 3-4 months. Thus, CBT-based exposure methods would be adequate for the treatment of choice for children and adults [17].

Other treatments include acceptance commitment therapy (ACT) [18]. Difference exists between CBT and ACT [19]. CBT may focus on re-evaluating cognitions and then changing behavior and avoidance, in order to decrease anxiety levels. In contrast, ACT can promote acceptance-oriented emotion regulation and important engagement in our lives [20]. ACT accepts clinical and psychological problem or situation that causes anxiety as it is. Furthermore, it encourages to stick to the values they always hold in the mind. For example, it is to live peacefully without having extreme anxiety.

As to the usual use of cannabis and its legalization, various medical concerns have been observed. They have benefits and risks for medical marijuana card (MMC) for clinical outcomes. For evaluating the effect of MMC, clinical influence and cannabis use disorder (CUD) symptoms were studied [21]. A randomized clinical trial (RCT) was conducted. Subjects were 186 cases with depression, anxiety, insomnia and chronic pain. For the protocol, cases in group A have MMC from 0 weeks, and cases in group B have MMC after 12 weeks. The former showed no significant improvement in anxiety, depression, or pain, and cannabis use disorders were found 3 times of the latter. It means that the former cases could not quit or reduce the use of the agent. This tendency was particularly pronounced among those suffering from anxiety and depression. The situation would be similar to alcohol use. In other words, drinking alcohol every night may reduce the anxiety, but it does not mean a medical agent [21].

Related to CBT and ACT, some Cognitive bias modification (CBM) therapies have been provided to various patients [22]. They are prototypical methods, including interpretation bias modification, attention bias modification (ABM) and approach or avoidance training. Clinical efficacy of several CBM interventions have been assessed for depressive and anxious

symptomatology.

In summary, anxiety has been one of the crucial problems in this society. For the management and treatment, CBT, ACT, CBM, ABM and others have been applied for various patients. This article will become hopefully an useful reference in the future research.

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