



Anxiety Disorders in Conventional and Unani medicine: A Review

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ABSTRACT

Anxiety is a common yet undertreated, understudied, and undertreated condition among the elderly. Examples include generalised anxiety disorder (GAD) and nonspecific anxiety symptoms that do not fit into a specific anxiety condition. Abnormal functioning of neurochemicals as well as abnormal chemoreceptor reactivity leads to anxiety. There are various neurotransmitters that are involved in anxiety such as gamma-amino butyric acid, serotonin, glutamate, Adenosine etc. Some are inhibitory and some are excitatory. These neurotransmitters might play role in upregulation or downregulation of anxiety disorders. This review article gives a bird's eye view of concept of anxiety disorder in conventional and Unani system of medicine. *Melancholia* is one of the classic psychiatric terms. There are many parallels between melancholia, an illness mentioned in the Unani system of medicine, and modern anxiety disorder, which is recognised in the conventional system of medicine. There are also some distinctions between the two. Unani academics were aware of psychiatric problems, and the concept is the result of a combined effort between ancient and traditional medical systems. The Canon of Medicine (Al-Qanun Fittib), The Complete Book of the Medical Art (Kamil Sana), Colleget (Kitabbul Kulliyat), Kitabul Umda Fil Jarahat, and Tib Akbar were the key works consulted. This study is based on a meticulous review of writings, compositions, and publications on melancholia and anxiety condition found on the internet in databases such as Web of Science, Scopus, PubMed, Google Scholar, and Medline..

Keywords: [Anxiety](#), [Melancholia](#), [Unani System of Medicine](#), [Medicatrix naturae](#).

Introduction

Anxiety, defined as a subjective feeling of unease, dread, or foreboding, can be a symptom of a main psychiatric problem or a component of or reaction to a primary medical disease.¹ Anxiety disorders, which are the most common psychiatric conditions in the general population, affect 15-20% of medical clinic patients.¹ According to extensive community-based surveys, up to 33.7% of the population suffers from an anxiety illness at some point in their lives. Approximately one-third of individuals with anxiety have a medical cause for their mental symptoms, although anxiety disorder can also appear with somatic symptoms in the absence of a diagnosable medical illness.² Generalised anxiety disorder (GAD) is the most frequent anxiety condition presenting in primary care settings, as well as being common in psychiatric practise. GAD is characterised by persistent, excessive, and/or unrealistic worry, as well as muscle tension, impaired concentration, autonomic arousal, feeling "on edge" or restless, and insomnia, which causes significant personal distress and imposes a significant economic burden.³ The degree of handicap caused by GAD is comparable to that caused by serious depression and is comparable to that caused by persistent physical disorders such as peptic ulcers, arthritis, asthma, and diabetes mellitus.⁴ Patients are frequently most concerned about the physical-somatic symptoms linked with GAD. Furthermore, GAD has been shown to cause impairment (e.g., impairments in physical function, role-physical factors, and general health, as well as bodily pain) that is comparable to or significantly greater than that seen in patients with non-psychiatric medical illnesses such as diabetes or recent myocardial infarction. The onset is usually before the age of 20, and there may be a history of childhood concerns and social constraint. GAD has a 5-6% lifetime prevalence; the risk is higher in first-degree relatives of people with the diagnosis.⁵ Surprisingly, family studies show that GAD and panic disorder segregate separately. More than 80% of GAD patients also have significant depression, dysthymia, or social phobia. Comorbid substance misuse, notably alcohol and/or sedative/hypnotic abuse, is widespread in these patients. Patients with GAD worry excessively about trivial issues, causing life disruption; in contrast to panic disorder, complaints of shortness of breath, palpitations, and tachycardia are very uncommon.⁶

All anxiogenic drugs, in terms of aetiology and pathophysiology, act on the -aminobutyric acid (GABA) receptor/chloride ion channel complex, implicating this neurotransmitter system in the pathogenesis of anxiety and panic attacks.¹ The amygdala, insula, and frontal cortex are all involved in the pathogenesis of GAD. The amygdala is a region of the brain connected with emotion. The basolateral amygdala complex in the amygdala recognises sensory input and activates GABAergic neurons, causing somatic sensations of anxiety. GABAergic neurons regulate the neurological system by lowering sensations of stress, anxiety, and terror. When there is an insufficient amount of GABAergic neurons, those negative feelings become obvious and can cause bodily stress responses.⁷⁻⁹ It has been suggested that individuals with GAD have greater amygdala and [medial prefrontal cortex](#) activity in response to stimuli than individuals who do not have GAD⁷. The relationship between GAD and activity levels in other parts of the frontal cortex, on the other hand, is the subject of ongoing research, with some literature suggesting greater activation in specific regions for individuals with anxiety, while other

research suggests decreased activation levels in individuals with anxiety compared to individuals without GAD.^{7,8} When it comes to the treatment of anxiety disorders, there are two basic categories: psychotherapy intervention and pharmaceutical intervention.¹⁰ Pharmacotherapy includes the use of benzodiazepines, selective serotonin receptor uptake inhibitors, serotonin and norepinephrine reuptake inhibitors, and beta blockers.¹¹

Unani System Of Medicine (USM) and Anxiety Disorder

The USM focuses on health promotion and prevention, as well as therapeutic and rehabilitative care. The basic framework of the USM is built on profound philosophical notions and scientific grounds. Among these are the four elements doctrine (air, water, fire, and earth), the four proximate qualities (Kayfiyat) (hot, cold, wet, and dry), and Hippocrates' humoral theory. This idea includes four humours: blood, yellow bile, black bile, and phlegm, which are connected with good health when in balance or equilibrium and with disease when an imbalance, an excess of one or more of the humours, exists. The number and quality of these humours determine the basis of health (i.e., when equilibrium in the body's internal environment is maintained).¹² Each humour is associated with one of the four seasons and is distinguished by a set of characteristics: yellow bile is warm and dry, black bile is cold and dry, blood is warm and wet, and phlegm is cold and moist. The black bile humour, connected with autumn and the attributes of coldness and dryness, is the most important in the aetiology and pathophysiology of melancholia.¹³ According to the USM, Medicatrix naturae (Tabiat Mudabbira-i Badan) is the supreme power that regulates all physiologic physiological systems. It aids in natural healing and improves illness resistance. Disease results from any alteration in the humour balance, whether quantitatively, qualitatively, or both. The goal of treatment is to reestablish equilibrium through the use of a number of treatment techniques of opposite temperament.¹⁴ Unani physicians recommend diet (Ilaj-bil-Ghiza), regimental therapy (Ilaj-bit-Tadbeer), medication (Dawa), and surgery (Ilaj-bil-Yad).¹⁵

In the Unani system of medicine, Anxiety disorder is referred to as *Izterāb-I-Nafsāni Umoomi*. Virtually *Izterāb-i-Nafsāni Umoomi* stands for worry, excessive thinking and fear. The description of Anxiety disorders as such, is not found in Unani literature but its symptoms show a considerable overlap with *Melancholia*.¹⁶ (Table 1 & 2) Melancholia was first written about by Hippocrates (460-377 BCE). He noted that this clinical disease was commonly associated with "aversion to food, despondency, sleeplessness, irritability, and restlessness," and it was dubbed melancholia.¹⁷ In his work *The Anatomy of Melancholy*, published in 1621, Robert Burton defined the signs of anxiety attacks in socially anxious people. "Many lamentable effects this fear causes in man, such as being red, pale, trembling, sweating; it causes sudden cold and heat to come over all the body, palpitation of the heart, syncope, and so on." Many guys who are to talk or exhibit themselves in public are astounded." Burton cited Hippocrates' writing on one of his patients, who apparently suffered from what we would call "social anxiety disorder" today, in the same book: "He dare not come into company for fear of being misused, disgraced, overshoot himself in gestures or speeches, or be sick; he thinks every man observeth him."¹⁸ Around the mid-nineteenth century, Wilhelm Griesinger used the term states of mental depression as a synonym for melancholia.¹⁹ Lypomania was coined by Jean Esquirol (1772-1840) as a synonym for melancholia.²⁰ Mental depression was mentioned as a synonym for melancholia in the *Dictionary of Psychological Medicine* in 1892.²¹

Melancholia is the Latin version of the Greek word *melaina chole*, which meant "biliousness" in ancient Greece and was also used in medical parlance to denote "crazy or anxious behaviour." This phrase was derived from the Latin term *atra bilis* and the English term black bile. *Melancholia* is classified into three types based on where the primary site of the disease is: (1) a type in which "the entire body is full of a melancholy blood"; (2) a type in which "only the brain has been invaded"; and (3) a type in which "*Miraq*" (the hypochondria) were "primarily affected known as *Melancholia Miraqi* (*Hypochondrial melancholia*)".²² Melancholia was described in detail by Rhazes (*Zakariyya al-Razi*, 865-925 CE), Ahmad bin Mohammad Tabri (980 CE), Haly Abbas (Ali ibn al-Majusi, 930-994 CE), and Avicenna (980-1037 CE). Melancholia was characterised by Avicenna in his work, *The Canon of Medicine* (*Al-Qanun Fittib*), as a type of disease in which the victims' imagination and judgement are so twisted that they become terribly sad and scared. Today, melancholia is mostly employed as a descriptive syndrome specifier of major depressive episodes (MDE), as described by DSMIV-TR.²³

ETIOLOGY

A body is healthy as long as the humours (Akhlāt) are in a condition of balance in terms of quality and quantity.²⁴ The USM considers aberrant melancholic humours (Sawda Ghayr Tabiiyya) to be a major etiological factor in melancholia. An excess of black bile (Sawda Ghayr Tabiiyya) affects the substance of the brain, causing melancholia. The spleen is essential in the aetiology of melancholia. The spleen's usual role of filtering out bad humour served to keep people healthy. Its defective function could result in an excess of black bile in the system, resulting in melancholia.¹⁰ According to Averroes (Ibn Rushid), the spleen is a spongy, loose-textured organ capable of "easily absorbing fluid from nearby parts of the body."²⁵ The spleen is a spongy organ that filters "thick, earthy, atrabillious humours primarily (Black bile) that formed in the liver."²⁶ Melancholic humours accumulate in the spleen and form the source of smoky vapours that rise from the hypochondriacal region to the brain, causing hypochondriacal melancholia (*Melancholia Miraqi*).²⁷

CLINICAL FEATURES:

According to Avicenna, persons suffering from melancholia are gloomy, melancholy, and scared.²⁷ Melancholic patients, according to Ali ibn al-Majusi, experience madness (Hadhayan), impaired memory, are anxious about loud noises, and desire isolation. He also noted that in the later phases of melancholia, numerous illusions such as the person believing himself to be an earthenware pot, the person believing his skin had dried up and become like parchment, and the person believing he did not have a head became characteristic.^{28,29} Some melancholics saw threats where none existed; others found benefits in objects where none existed; some worried their friends, while others feared humanity as a whole. Furthermore, melancholics tended to avoid social situations and sought alone.²⁸ Akbar Arzani defines melancholia in his book *Tibb Akbari* as a disorder in which the faculty of imagination

and judgement are fully lost and happens only in people with a melancholic temperament (saudawi mizaj).³⁰ According to Avicenna, this sickness is particularly common during the summer and spring seasons.²⁷ Averroes (Ibn Rushd, 1126-1198 CE) characterised certain melancholic disorders (saudawi Amraz). as having a familial occurrence²⁵

Conclusion

In addition to curative and rehabilitative care, the USM focuses on health promotion and prevention. According to the USM, a body is healthy as long as the humours (Akhlat) are in balance, both in terms of quality and quantity. Melancholia is thought to be caused by abnormal melancholic humours. Nowadays, melancholia is generally utilised as a DSMIV-TR descriptive syndrome specifier of major depressive episodes (MDE). Although there are differences between melancholia and anxiety disorders, it can be concluded from the foregoing research that Unani scholars were aware of the mental diseases and the concept is a combined effort of both Unani and the conventional system of medicine.

Table 1 Similarities between *melancholia* and anxiety Disorder

Anxiety Disorder	MELANCHOLIA
<ol style="list-style-type: none"> 1. The cognitive component of anxiety is related to cognitive distortions in the attention, interpretation, and memory components for information processing. Slow thinking, distractibility, reduced memory, and indecisiveness are all symptoms of poor attention and concentration.³¹ 2. Somatic symptoms include sleep avoidance, insomnia, nightmares, and refusal/reluctance to sleep alone. Tachycardia, palpitations, chest discomfort, shortness of breath, and other symptoms sex drive loss and sex drive loss.^{31,32} 3. Genetic factors and familial predisposition are important.³⁴ 4. Social and environmental stressors like demographic factors, life events can precipitate illness in vulnerable people³⁵ 5. Anxiety disorders show seasonal variation. Most commonly occurring during the winter season.³⁶ 6. Alcohol intake precipitates symptoms of Anxiety disorder. Drug abuse dependency frequently coexists with serious illness.³⁵ 7. Exercise, particularly aerobic exercise, has been shown to improve anxiety symptoms.³⁵ 	<ol style="list-style-type: none"> 1. The mood swings from mild melancholy and extreme depression, with feelings of guilt, worthlessness, and hopelessness. Difficulties in thinking, such as failure to concentrate, ruminations, and a lack of decisiveness. Loss of interest, resulting in less involvement in work.^{27,33} 2. Somatic complaints include disturbed or reduced sleep, fatigue, lack of energy, palpitations, nightmares, changes in appetite, and diminished sexual drive.^{22,33} 3. Melancholic disorders (saudawi Amraz) have familial occurrence.²⁵ 4. In vulnerable people, social and environmental pressures may give rise to an illness.²² 5. Melancholia varies seasonally. Summer and spring are the most usual times for this to happen.²⁷ 6. Certain foods, such as cabbage, cheese, and pickles, as well as alcohol consumption, predispose to melancholia symptoms.^{10,28} 7. Motivating melancholy individuals to engage in joyful activities aids in the relief of symptoms.^{22,33}

Table 2 Differences between *melancholia* and Anxiety Disorder

Anxiety Disorder	Melancholia
<ol style="list-style-type: none"> 1. Abnormal functioning of neurochemicals such as gamma-amino butyric acid serotonin, dopamine and norepinephrine as well as abnormal chemoreceptor reactivity leads to anxiety.³¹ 2. The amygdala part of the brain that is associated with Anxiety disorders.¹ 3. Anxiety disorder occurs two fold more common among women than men.^{1,35} 4. Derangement in HPA-axis and sympatho-adrenal axis.³⁵ 5. Most commonly occurring prior to 4th decade of life.^{1,35} 6. Management include medications (Benzodiazepines, Selective Serotonin Reuptake Inhibitors, Beta Blockers) and psychotherapy.^{1,6} 	<ol style="list-style-type: none"> 1. Abnormal melancholic humours (Sauda Ghayr Tabiiyya) are thought to be an important etiological factor in melancholia.²⁷ 2. The spleen is important in melancholia because it accumulates and secretes black bile.²⁶ 3. Males are more prone to melancholia.^{27,33} 4. Changes in the quantity or quality of bodily humour.^{13,16} 5. Most commonly occurring after 4th decade of life.³³ 6. For Melancholia, the following pharmacotherapy (Ilaj Bil Dawa) is recommended: concoction and expulsion (Nuzuj Wa Tanqiyah) of aberrant humours (Sauda Ghayr Tabiiyya), primarily with venesection (fasd), moisturization of the head (Tarteeb Ra'as), and the use of sitz bath.^{2,27,33}

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Conflict of Interest

None.

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