

The Black Dog Institute and the Sub-Typing Model of Depression

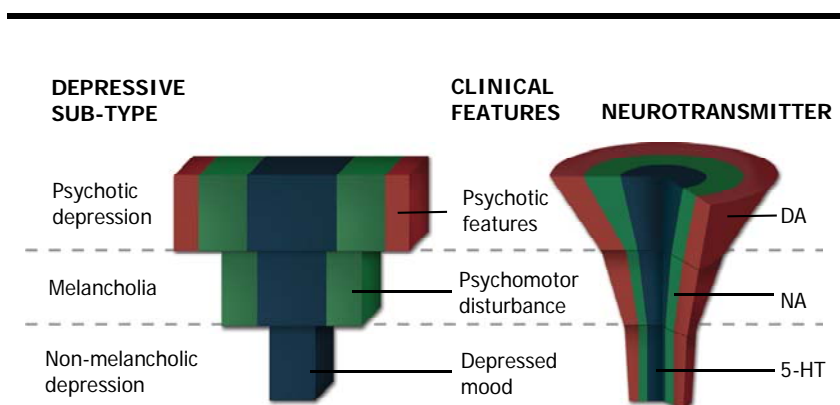
The Black Dog Institute is a not-for-profit, government funded organisation, established to promote research and education in mood disorders. The Institute undertakes a variety of research projects and provides tertiary level clinical services, community support and professional services. As part of this work, the Mood Assessment Program was developed to support clinicians as part of the Institute's agenda to improve the quality of care of patients with mood disorders.

There is a large body of clinical and research evidence to indicate that clinical depression is not a single illness but comprise differing sub-types that may reflect a number of different causes. Research at the Black Dog Institute and elsewhere suggests that identifying the sub-type of depression and using that information to guide treatment planning significantly improves patient outcomes.

Traditionally, depression treatment has been determined largely by the perceived severity of the illness. A more helpful alternative is to consider a sub-typing model which matches clinical features to environmental factors and neurotransmitter deficits.

The Black Dog Hierarchical Model divides depression into sub-types, psychotic, melancholic and non-melancholic depression and considers Bipolar Disorder separately from unipolar depression

Hierarchical Model of Depressive Disorders



- *Non-melancholic depression* of any severity meets DSM and ICD criteria for depression in that there is depressed mood for longer than 14 days accompanied by decline in self-esteem, increased self-criticism and social impairment. Non-melancholic depression is by far the commonest form of depression in the community and is thought to be most related to dysfunction of the serotonergic pathways in the brain.
- *Melancholic Depression* has all the features of non-melancholic depression but, in addition, there are observable features of psychomotor disturbance either in terms of agitation or retardation. Psychomotor disturbance includes changes in cognitive processing as well as in activity levels.

Associated symptoms include anhedonia (loss of pleasure in life), early morning waking and typical diurnal rhythm of increased severity of symptoms early in the day and a profound and uncharacteristic sense of emptiness. The Black Dog model proposes that these additional features in melancholic depression represent noradrenergic dysfunction superimposed on serotonergic dysfunction.

- *Psychotic depression* represents an additional category, a sub-set of melancholic depression, where psychotic features are present. Psychotic features include mood-congruent delusions and hallucinations, overvalued ideas and guilty ruminations (eg fear about the repercussions of minor transgressions past or present). The presence of psychotic features is thought to represent dysfunction of the dopaminergic system.

In addition to these elements the model emphasises that *acute and chronic stressors* and *personality vulnerability* play an important role in the development of depressive illness especially in the non-melancholic sub-type.

- *Bipolar disorder* needs to be considered in any patient presenting with depressive illness. Bipolar I disorder has a lifetime prevalence of 1-2% in Australians and for Bipolar 2 disorder that figure may be as high as 6%. While some 30% of depressed patients referred to psychiatrists by physicians have a bipolar course. Bipolar depression can be equally severe in Bipolar 1 and Bipolar 2. The distinguishing feature between these two groups is the nature of the "highs". Patients with Bipolar 1 disorder have periods of mania with psychotic features whilst those with Bipolar 2 disorder tend to have hypomania rather than mania and do not experience psychotic features during their "highs"

To assist in the identification of patients with likely Bipolar Disorder there is a screening tool on the Black Dog website designed for patients who have ever had depression to help determine whether they have ever experienced "highs".

Further information and resources available at www.blackdoginstitute.org.au.