Journal of Advances and Scholarly Researches in Allied Education

Vol. IX, Issue No. XVIII, April-2015, ISSN 2230-7540

VARIATION IN HUMAN INTELLIGENCE WITH MOOD DISORDERS

AN INTERNATIONALLY INDEXED PEER REVIEWED & REFEREED JOURNAL

www.ignited.in

Journal of Advances and Scholarly Researches in Allied Education
Vol. IX, Issue No. XVIII, April-2015, ISSN 2230-7540

Variation in Human Intelligence with Mood Disorders

Prameela R.[1] Dr. Wayne Bottiger[2]

[1]KEISIE International University

[2]President of KIU, South Korea

Abstract – Mood disorders are complex psychiatric disorders that are the leading cause of disability. They include major depressive disorder (MDD) and bipolar disorder (BD). Both are highly heritable, i.e. the variance between individuals is, in MDD partly and in BD mostly, explained by genetic factors. Their specific genetic background, however, remains widely unknown. Previous linkage and association studies have revealed some potential candidate genes and genomic areas that seem to predispose to mood disorders, at least in some populations and subsamples. Recent genome wide association (GWA) studies have revealed some novel susceptibility genes and risk variants as the field has moved into the era of genome-wide genotyping of huge samples sizes from collaborative studies. The risk variants revealed with this approach, however, cover only a small fraction of the total heritability of these diseases. They will definitely reveal important etiological factors for the disease and might help to develop new, more efficient drugs, but they will not tell the whole story of genetics behind mood disorders.

Keywords: Variation, Human, Intelligence, Mood Disorders, Diseases, Heritability, Psychiatric, Disorders, Disability, Genetic Factors, Genes, Population, etc.

----------X----------

INTRODUCTION

A mood disorder is the term given for a group of diagnoses in the DSM IV TR classification system where a disturbance in the person's emotional mood is hypothesized to be the main underlying feature The classification is known as mood (affective) disorders in ICD.

Psychiatrist Henry Maudsley proposed an overarching category of affective disorder. The term was then replaced by mood disorder, as the latter term refers to the underlying or longitudinal emotional state, whereas the former refers to the external expression observed by others.

Two groups of mood disorders are broadly recognized; the division is based on whether the person has ever had a manic or hypomanic episode (Bethscheider 1990, Daniel, 1980 & 1982). Thus, there are depressive disorders, of which the best known and most researched is major depressive disorder commonly called clinical depression or major depression, and bipolar disorder, formerly known as "manic depression" and described by intermittent periods of manic and depressed episodes.

REVIEW OF LITERATURE:

A mood disorder can be classified as substance-induced if its etiology can be traced to the direct physiologic effects of a drug or other chemical substance, or if the development of the mood disorder occurred contemporaneously with substance intoxication or withdrawal. Alternately, an individual may have a mood disorder coexisting with a substance abuse disorder. Substance-induced mood disorders can have features of a manic, hypomanic, mixed, or depressive episode (Cattell, 1886a). Most substances can induce a variety of mood disorders. For example, stimulants such as amphetamine, methamphetamine, and cocaine can cause manic, hypomanic, mixed, and depressive episodes.

1. Depressive disorders:

- Major depressive disorder, commonly called Major depression or unipolar depression, where a person has two or more major depressive episodes. Depression without periods of mania is sometimes referred to as unipolar depression because the mood remains at one emotional state or "pole".

Diagnosticians recognize several subtypes or course specifies:

- Atypical depression is characterized by mood reactivity (paradoxical anhedonia) and positivity, significant weight gain or increased appetite ("comfort eating"), excessive sleep or somnolence (hypersomnia), a sensation of heaviness in limbs known as leaden paralysis, and significant social impairment as a consequence of hypersensitivity to perceived interpersonal rejection (Daniel, 1983). Difficulties in measuring this subtype have led to questions of its validity and prevalence.

- Melancholic depression is characterized by a loss of pleasure (anhedonia) in most or all activities, a failure of reactivity to pleasurable stimuli, a quality of depressed mood more pronounced than that of grief or loss, a worsening of symptoms in the morning hours, early morning waking, psychomotor retardation, excessive weight loss (not to be confused with anorexia nervosa), or excessive guilt.

- Psychotic depression is the term for a major depressive episode, particularly of melancholic nature, where the patient experiences psychotic symptoms such as delusions or, less commonly, hallucinations. These are most commonly mood-congruent (content coincident with depressive themes).

2. Bipolar disorders:

- Bipolar disorder, a mood disorder formerly known as "manic depression" and described by alternating periods of mania and depression (and in some cases rapid cycling, mixed states, and psychotic symptoms).

- Bipolar is distinguished by the presence or history of one or more manic episodes or mixed episodes with or without major depressive episodes. A depressive episode is not required for the diagnosis of Bipolar I disorder, but depressive episodes are often part of the course of the illness.

- Bipolar II consisting of recurrent intermittent hypomanic and depressive episodes.

- Cyclothymia is a milder form of bipolar disorder, consisting of recurrent hypomanic and dysthymic episodes, but no full manic episodes or full major depressive episodes.

- Bipolar Disorder NOS, sometimes called "sub-threshold" bipolar, indicates that the patient suffers from some symptoms in the bipolar spectrum (e.g. manic and depressive symptoms) but does not fully qualify for any of the three formal bipolar DSM-IV diagnoses mentioned above.

It is estimated that roughly one percent of the adult population suffers from Bipolar I, roughly one percent of the adult population suffers from Bipolar II or Cyclothymia, and somewhere between two and five percent suffer from "sub-threshold" forms of bipolar disorder.

3. Alcohol-induced mood disorders:

High rates of major depressive disorder occur in heavy drinkers and those with alcoholism. Controversy has previously surrounded whether those who abused alcohol and developed depression were self-medicating their pre-existing depression, but recent research has concluded that, while this may be true in some cases, alcohol misuse directly causes the development of depression in a significant number of heavy drinkers. High rates of suicide also occur in those who have alcohol-related problems (Deary, 1986). It is usually possible to differentiate between alcohol-related depression and depression which is not related to alcohol intake by taking a careful history of the patient Depression and other mental health problems associated with alcohol misuse may be due to distortion of brain chemistry, as they tend to improve on their own after a period of abstinence.

4. Benzodiazapine-induced mood disorders:

Long term use of benzodiazepines which have a similar effect on the brain as alcohol and are also associated with depression. Major depressive disorder can also develop as a result of chronic use of benzodiazepines or as part of a protracted withdrawal syndrome. Benzodiazepines are a class of medication which is commonly used to treat insomnia, anxiety and muscular spasms. As with alcohol, the effects of benzodiazepine on neurochemistry, such as decreased levels of serotonin and norepinephrine, are believed to be responsible for the increased depression. Major depressive disorder may also occur as part of the benzodiazepine withdrawal syndrome. In a long-term follow-up study of patients dependent on benzodiazepines, it was found that 10 people (20%) had taken drug overdoses whilst on chronic benzodiazepine medication despite only two people ever having had any pre-existing depressive disorder (Cattell, 1886b).

CONCLUSION:

Despite the shift of genetic research to the era of large scale mood disorders studies and availability of the whole human genome sequence, the genetic background of mood disorders and BD remains largely unknown. Thus, the studies are still valid, in particular when performed in homogenous populations with detailed phenotypic information available for further dissection of the heterogeneous and complex phenotypes to those with genetically simpler

architecture. This study implies that some of the classical candidate genes of mood disorders, including variants have an effect on the disease susceptibility and that some psychotic related candidate genes have an effect on general intellectual functions that are potential end phenotypes of psychiatric disorders.

REFERENCES:

Bethscheider, J. K. (1990). The color discrimination project (Technical Report 1990-2). Chicago: Johnson O'Connor Research Foundation.

Cattell, J. M. (1886a). The inertia of the eye and brain. Brain, 8, pp. 295-381.

Cattell, J. M. (1886b). The time taken up by cerebral operations. Mind, 11, pp. 220-242; 377-392; 524-538.

Daniel, M. H. (1980). Reliability of Pitch Discrimination, Wks. 315 FA (Statistical Bulletin 1980-15). Boston: Johnson O'Connor Research Foundation.

Daniel, M. H. (1982). A factorial study of reasoning tests (Technical Report 1982-6). Boston: Johnson O'Connor Research Foundation. (ERIC Document Reproduction Service No. ED pp. 230 571)

Daniel, M. H. (1983). Aptitudes of physicians (Technical Report 1983-6). Boston: Johnson O'Connor Research Foundation. (ERIC Document Reproduction Service No. ED 288 911)

Deary, I. J. (1986). Inspection time: Discovery or rediscovery? Personality and Individual Differences, 7, pp. 625-631.