Polar Disorder

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Bipolar Disorder

**Effects on Central Nervous System**

Various types of neurotransmitter chemicals are present in the human brain that allow the transmission of various nerve impulses across the neurons (“Gulf Bend MHMR Center,” n.d.). Neurotransmitters such as dopamine, norepinephrine, serotonin, GABA (gamma-aminobutyrate), glutamate, and acetylcholine are mainly associated with bipolar disorder. According to another research, neuropeptides that include endorphins, somatostatin, vasopressin, and oxytocin are also suspected to be present in the brains of affected individuals (Maletic & Raison, 2014). A wide area of interest in bipolar research is testing neurotransmitters, the chemical changes associated with it, positions, and their impact. This is understood that in an individual with bipolar disorder, certain molecules are somehow uneven in the brain relative to a person without the disease. For instance, it is observed that the blood and spinal fluid of bipolar individuals have a low level of GABA, while oxytocin- active neurons are seen to be present at elevated levels (Maletic & Raison, 2014). These are usually structural abnormalities. However, these findings do not contribute to understanding the overall brain functioning in disorder. Some of the changes observed in the bipolar brain are the reduction in size and the Neuroprogression (Wollenhaupt-Aguiar et al., 2016). Neuroprogression is characterized by the alteration of normal brain functioning, which results in a pathological condition associated with the learning, memory, and repair system. Such changes are mainly the functional abnormalities associated with a disease.

**Symptoms**

According to the DMS-IV TR, Symptoms of bipolar disorder depend on the type of the bipolar episode. Throughout the manic state, individual experiences the feelings of extreme vitality, inventiveness and ecstasy. Depression phase possibly involves feelings of prickliness, remorse, random temper blows, and agitation. Symptoms involved in the mixed episode are depression shared with feelings of restlessness, prickliness, lack of sleep, anxiety and extreme flow of thoughts (First, France, & Pincus, 2004).

**References**

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