Example of research paper on biological influences - neurotransmitters

Health & Medicine, Body

Neurotransmitters are biochemical substances that carry the information between the body and the brain. They transmit neuronal signals that are necessary to inform the brain on which functions to carry out through networks of neurons called synapses (Boeree, 2009). The neurotransmitters may be inhibitory or excitatory. The excitatory neurotransmitters are those that cause the brain to perform certain physiological functions while the inhibitory neurotransmitters bring balance to these functions that are designed to suppress or inhibit them (Neurogistics, 2013).

The functions of the neurotransmitters in the body are significant as the neuronal signals transmitted by them influence bodily function. Any excess or lack of neurotransmitters may lead to disorders or diseases. An example of a disorder that is associated with neurotransmitter dysfunction is the Myasthenia Gravis. The disorder is characterized by a significant muscular weakness which increases during activities and then the condition improves during periods of rest. This is caused by the deficiency in the neurotransmitter called acetylcholine in the body which is responsible for sending impulses to the muscles that stimulates muscle contraction. In the absence of or lack of acetylcholine neurotransmitters, the muscles become weak owing to the lack of stimulating responses from acetylcholine (National Institute for Health, 2012).

Another disorder that is associated with neurotransmitter dysfunction is depression which is associated with the lack of dopamine in the body. Dopamine is a neurotransmitter responsible for the feeling of pleasure, motivation, increased concentration and alertness. The lack of dopamine in the body results to the feeling of lowliness, sadness, lack of concentration

and poor mental concentration which are the common symptoms of depression and low mood. The lack of the neurotransmitters like the acetylcholine and dopamine in the body could possibly influence the bodily response, mood and behavior which to a greater extent result to the occurrence of physiological and psychological disorders.

References:

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