Movement Disorders (MD) are important in clinical neurology because they are quite common. Understanding the pathophysiology of MD requires understanding of the neurochemical organisation of the basal ganglia (a complex of five well interconnected subcortical nuclei). Clinically, the basal ganglia disorders are recognized as movement disorders and could be divided into the hypokinetic or akinetic-rigid syndromes (characterized by slowness and difficulty in generating voluntary movement) and the hyperkinetic movement disorders (characterized by abnormal involuntary movements). In addition, nonmotor symptoms are increasingly recognized as important determinant of quality of life (QoL) in MD.

One of the best known MD, Parkinson’s disease (PD), was the first disease of the brain where specific neurotransmitter (dopamine) deficit was shown to be a major causal factor in characteristic motor symptoms. Dopamine replacement therapy became the first effective treatment and many drugs for similar indications (DA agonists, MAO-B inhibitors, COMT inhibitors) as well as procedures (Deep brain stimulation-DBS, Duodopa-duodenal infusion pump etc) have been developed. The evidence-based medicine review will be presented to update the field of MD therapy and highlights the current research of MD.