The Use of PET/SPECT in Detecting and Treating Mental Health Disorders

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**Abstract**

Mental health disorders affect over 792 million people worldwide, a leading cause of disability. Mental health disorders include a plethora of conditions that affect mood, thinking, and behavior, including but not limited to, depression, dementia, anxiety, autism, and schizophrenia. The most common method of diagnosis is a psychological evaluation, which can lack accuracy if performed as the only method of diagnosis. Nuclear Medicine helps aid in the diagnosis of these disorders in conjunction with psychological testing. Brain scans can help determine if there is a pathogenic cause for the symptoms. Brain scans are done utilizing Positron Emission Tomography (PET) scans and Single Photon Emission Computerized Tomography (SPECT) scans. Advancements in these studies allow Nuclear Medicine to better aid in diagnosing and treating this wide range of disorders.

*Keywords:* Nuclear Medicine, PET, SPECT, mental illness, diagnose, treatment, mental health.