

**Press Release****Necessity of the time: Recording brain activity among patients with Depression**

Dr. Shrikant Srivastava (Head, Geriatric Mental Health, King George Medical University UP) and his team of research workers - Mrs Anamika Srivastava and Dr. Soumyajit Sanyal, are currently involved in understanding the changes happening in the brain of depressed older adults, using Electroencephalography (EEG) brain mapping. The study is first of its kind in India, though, EEG has been used for than 30 years primarily to diagnose epilepsy. EEG measures the electrical activity of the brain, and this is carried out by placing wires on the head. The electrical wave patterns over the surface of the head as measured by EEG are commonly referred as “brain waves”.

Currently, two studies on brainwave pattern are underway on patients with depression. The first study aims to study the changes in brainwaves, taste thresholds and memory functions in cases of depression, before and after treatment. The department is undertaking this research considering the outcomes of various researches stating that drugs administration overtime decreases the thresholds for sweet, salt and bitter sensations. This study also explores any related mental changes such as memory associated with pre-treatment and post-treatment stages. The second study has been submitted with the purpose to explore brainwaves profile and mental functions like memory status among greater age range of 30 years to 70 years among patients with depression and their healthy counterparts. With the evidences for slowed a skewed mental processing in depression, it becomes important to explore brain network dynamics.

These results may contribute in differentiating the mechanisms involved in mental processing of healthy controls. The results from these studies will enable the doctors, researchers, stakeholders and individuals interested in the subject to work towards promoting transparency of methods and processes, drug decision making with respect to treatment and management, and holistically for the quality of life of the patient(s).