

## **Yoga for mental health – Effects to mechanisms**

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Yoga has been a lifestyle practice for millennia in India, originally designed to facilitate spiritual progress of an individual. A feeling of wellbeing after practice is common to most practitioners, and there is now significant evidence to indicate that the practice of yoga has salutary effects on both physical and mental health. Yoga practice has shown benefit in improving physical and mental abilities in healthy individuals, and yoga-based interventions as therapy have shown efficacy in several physical disorders.

Recent evidence from NIMHANS and other centres worldwide has demonstrated that yoga is efficacious in Depression and also has shown significant promise as an adjunctive treatment in Schizophrenia, the most severe mental disorder. In fact, based on studies from NIMHANS, Yoga has been added as a complementary therapy for Schizophrenia in the NICE guidelines (UK). There is also early evidence for yoga as a therapy in other mental disorders like cognitive disorders of the elderly, Attention Deficit Hyperactivity Disorder in children, somatoform disorders and Obsessive Compulsive Disorder.

Recent studies at the NIMHANS Integrated Centre for Yoga have also thrown light on some of the brain mechanisms underlying the above effects. These include reduction in markers of stress such as Cortisol levels, improvement in markers of neuroplasticity such as Brain Derived Neurotrophic Factor (BDNF), and modulation of neurohormones like Oxytocin and activity of the Mirror Neuron System. There is also small but direct evidence that yoga practices lead to measurable changes in brain connectivity and blood flow in the brain.

The talk will focus on current evidence for the effects of Yoga on psychiatric disorders and the interesting neurobiological mechanisms underlying the effects of Yoga in the human brain.