

Chapter 4.0
AIMS & OBJECTIVES

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4.1 AIM

To study the effect of yoga based intervention on social cognition in patients with schizophrenia.

4.2 OBJECTIVES

Primary objective

1. To study the effect of add-on yoga therapy on Social Cognition measures (composite score of SOCRATIS and TRENDS)

Secondary objective

1. To study the effect of add-on yoga therapy on Mirror Neuron Activity (MNA) using functional Near Infrared Spectroscopy (fNIRS) in patients with schizophrenia.

4.3 RESEARCH QUESTION

1. Can add-on yoga therapy improve social cognition scores measured by SOCRATIS and TRENDS in patients with schizophrenia?

2) Can add-on yoga therapy enhance MNA measured by fNIRS in patients with schizophrenia

4.4 RESEARCH HYPOTHESES

Alternate hypothesis

H_{a1}: Add-on Yoga therapy will enhance SOCRATIS & TRENDS scores in patients with schizophrenia.

H_{a2}: Add-on yoga therapy will enhance MNA measured by fNIRS in patients with schizophrenia

Null Hypotheses

H₀₁: Add-on Yoga therapy will not enhance SOCRATIS & TRENDS scores in patients with schizophrenia

H₀2: Add-on yoga therapy will enhance MNA measured by fNIRS in patients with schizophrenia

4.5 RATIONALE OF THE STUDY

In spite of the availability of various psychosocial interventions, still the translation of research evidence into clinical utility is highly questionable. For example, one of the interventions- Cognitive Enhancement Therapy (CET) has a robust evidence for social cognition improvement including the neurocognition and functioning level. But its application in real world scenario is doubtful as it is highly resource intensive. Similar is the issue with majority of available psychosocial interventions, especially in countries like India, where there is a huge imbalance in clinician/therapist and patient ratio. Also, the suitability of the available interventions in Indian population are yet to be investigated, in the context of cultural differences.

Hence exploring other alternative therapies for cognitive deficit in schizophrenia is the need of the hour. Yoga has been in use widely for various lifestyle disorders including mental health conditions like depression, anxiety and pain disorders. Yoga has been found to improve cognition in healthy population (Gothe & McAuley, 2015) and in some non-psychiatric conditions (Velikonja, Čurić, Ožura, & Jazbec, 2010) (Chattha R, Nagarathna R, Padmalatha V, 2008). Utility of yoga for cognition in mental health disorders is an area that needs exploration (Hariprasad et al., 2013). Earlier studies have looked into Facial Emotion Recognition Deficit (FERD) and oxytocin levels with yoga intervention in schizophrenia (Jayaram et al., 2013) (R V Behere et al., 2011), but a comprehensive investigation of social cognition with yoga intervention in schizophrenia has not been done earlier.