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ROLE OF YOGA THERAPY IN THE MANAGEMENT SCHIZOPHRENIA

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ABSTRACT:

Schizophrenia is a severe mental disorder and it's continuously manifesting as one of the top causes of disease related disabilities. The psychopathology of this disease affects most of the people in their productive age. Treatment of this disease is mainly based on psychotherapy. This pharmacological treatment alone gives the sub-optimal results in these patients. Pharmacotherapy is also related to persistent residual symptoms and adverse effects. Yoga as a therapy has proven to be effective as a sole or additional intervention in psychiatric disorders such as depression and anxiety. Recently, there has been significant interest in the application of yoga therapy in psychosis and schizophrenia. Various researches have demonstrated the efficacy and feasibility of yoga therapy in schizophrenia. It significantly improves the negative symptoms and cognition. The full biological elucidation of these effects is still a matter of research. But some positive outcomes from various researches proves that adding yoga intervention to standard pharmacological treatment is feasible and may be beneficial even in the early and acute stage of psychosis diseases like schizophrenia.

Key Words: *Asanas*, Schizophrenia, Yoga

INTRODUCTION

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Schizophrenia is a mental disturbance that lasts for at least 6 months and includes at least 1 month of active phase symptoms (two or more) of the following: Delusions, hallucinations, disorganized speech, disorganized behavior, and the negative symptoms¹. Impaired cognitive function (difficulties in

memory, attention, and executive functioning) is a third important symptom cluster².

Schizophrenia is a severe mental disorder that manifests itself mainly by positive symptoms (delusions and hallucinations) and negative symptoms (lack of motivation, reduction in spontaneous speech, and social withdrawal) etc. this psychopathology of this disease has a great impact on day to day life of the patient in his social and occupational functioning. It also creates a considerable socioeconomic burden to the patients.

AIMS AND OBJECTIVE

- To signify the possible role of yoga therapy in schizophrenia.
- To search evidence for the use of yoga therapy in patients with schizophrenia.
- To find out some common guidelines and precautions while doing yoga in these patients.

The related literature was searched online using PubMed/MEDLINE, Google Scholar, Biosis and various available online journals.

General description

Schizophrenia affects persons in the productive age group and the majority of the affected have a chronic course.

Consequently, the disorder ranks in the top ten causes of disease-related disability in the age group 15 to 40 years³. Despite best antipsychotic medications, residual symptoms particularly in the form of negative and cognitive symptoms produce significant disability. The cause of the disease is still in question. Physiologically, it seems that there is an overreaction of the neurotransmitters in the brain at the synapse level, highlighted by an imbalance of chemicals (mostly hormones in the blood – adrenalin, serotonin and catecholamine are possibly such chemicals).

Schizophrenia is diagnosed mainly on two types of symptoms, positive and negative symptoms. Positive, or florid, symptoms appear as an excess or distortion of everyday behavior. They include psychotic features such as delusions or hallucinations, disorganized speech or thinking, and chaotic or confused behavior. Negative symptoms appear as a decrease or loss of everyday functions. They include: flattened affect, poverty of speech, and loss of motivation.

Current treatment options

Because the causes of schizophrenia are still unknown, treatments focus on eliminating the symptoms of the disease. Treatments include antipsychotic

medications and various psychosocial treatments. Antipsychotic medications have been available since the mid 1950. The older types are called conventional or "typical" antipsychotics. Some of the more commonly used typical medications include Chlorpromazine, Haloperidol etc. Some newer "atypical" antipsychotics are currently introduced. Psychosocial treatments can help people with schizophrenia those are already stabilized on antipsychotic medication. Psychosocial treatments help these patients deal with the everyday challenges of the illness, such as difficulty with communication, self-care, work, and forming and keeping relationships. Learning and using coping mechanisms to address these problems allow people with schizophrenia to socialize and attend school and work. Patients who receive regular psychosocial treatment also are more likely to keep taking their medication, and they are less likely to have relapses or be hospitalized. Other important aspect of therapy is rehabilitation of these patients. Rehabilitation emphasizes social and vocational training to help people with schizophrenia function better in their communities. Because schizophrenia usually develops in people during the critical career-forming years of life (ages 18 to 35), and because the disease makes normal thinking and functioning difficult,

most patients do not receive training in the skills needed for a job.

Challenges to pharmacological therapy

The main concern about all these medicines is there adverse side effects. Side effects of many antipsychotics include: Drowsiness, Dizziness in changing positions, Blurred vision, Rapid heartbeat, Sensitivity to the sun, Skin rashes, weight gain etc. These medications may increase a person's risk of getting diabetes and high cholesterol⁴. Long-term use of antipsychotic medicines may increase the risk of a movement disorder called tardive dyskinesia. This condition causes repeated movements that the person cannot control. Despite best antipsychotic medications, residual symptoms particularly in form of negative and cognitive symptoms produces significant disability. Even after antipsychotic therapy, nearly 30% cases are refractory.

Role of yoga therapy

In schizophrenia various other adjunctive therapies are used and yoga is also one of them. Various researchers have proved a positive role of yoga therapy in this disorder. Yoga is the oldest system of holistic health in the world with its roots originating in Indian philosophy. The contribution of yoga on mental health practice has been acknowledged

worldwide and is used as an adjunct to psychotherapy in several countries. Yoga harmonizes the body, breath, mind and spirit. The ultimate goal of yoga is complete liberation from all the sufferings. Yoga has emerged as an attractive add-on intervention. There is large number of researches that claims a positive role of yoga therapy in schizophrenic patients however; efficacy of yoga therapy in the management of patients with schizophrenia is still understudied. Yoga practice, including physical postures, yoga breathing, and meditation and guided relaxation improved delayed recall of spatial information in children⁵. Regular yoga practice could improve executive functions like manipulation of information in the verbal working memory, attention span and visual motor speed of the patients suffering from major depression and other mental disorders⁶. Yoga has been shown to improve social and occupational functioning, better adjustments to day to day life problems, positive outlook towards life, work, useful in reducing stress, improved mood, and improvement in overall quality of life⁷⁻⁸. Many of researches have shown that yoga therapy help to reduce scores of anxiety, depression, tension and also help to improve the general wellbeing of patient⁹. This therapy has been shown to reduce heart rate and blood pressure, increase

lung capacity, increase the amount of time the breath can be held, improve muscle relaxation and body composition, cause weight loss and increase overall physical endurance¹⁰. Yoga practice, in conjunction with conventional medical treatment, may improve schizophrenic symptoms, social and occupational functioning, quality of life, discipline, and adaptive functioning among schizophrenic patients¹¹.

Benefits of yoga therapy

- Yoga improves thought process and control of emotions.
- Relieves stress and reduces mental conflict state.
- Reduces intensity of negative symptoms.
- Reduces refractoriness of disease.
- Reduces the adverse effects of antipsychotics.

Special precautions to be taken while doing yoga

1. Attentions to be paid on breathing pattern for attaining each posture.

Yoga is not just physical exercise. It requires a close look on breathing pattern while attaining a particular posture. Breathing pattern is important as it helps to reduce the anxiety and stress levels while doing these *asanas*.

2. Acute psychotic episodes may get precipitate by intensive meditation

in individuals with a history of schizophrenia¹². So it's very important that we avoid all *Dhyanatmak* (meditation) *asana* in patients of schizophrenia.

General Yogic practices that are helpful in schizophrenia

There is no any hard and fast rule about which *asana* are helpful or which are not. The main *asanas* that can be advised are those helpful in maintaining concentration levels and are easy for the beginners. There is a simplified listing of all those basic *asanas* that are helpful. Before starting this regimen one has to free from all natural urges and try sitting in calm and well-ventilated environment.

These *asanas* are the very basic poses for the beginners and can be advised to all patients of schizophrenia. If a patient is suffering from back pain then one should avoid the forward bending postures.

- First of all patient should start from micro joint movement (*Sukshma Vyayam*) which helps to easily attain the required yoga posture.
- Standing posture- *Suryanamaskara*^{13, 14} (sun salutation), *Tadasana* (palm tree pose), *Vrukshasana* (tree pose) and

Trikonasana (triangle pose), each repeated to three times.

- Sitting posture- *Padmasana* (lotus pose), *Sukhasana* (auspicious/easy pose), *Vajrasana* (diamond pose) etc. each repeated three times.
- Prone posture- *Dhanurasana* (bow pose), *Makarasana* (crocodile pose), *Shalabhasana* (locust pose) etc.
- Supine posture- *Shavasana*¹⁵ (corpse pose) is the most important *asana* in supine posture and it help to calm down the mental conflict state. It should be practiced for at least 10-15 minutes. Other beneficial *asanas* in supine posture are, *Naukasana* (boat pose), *Pawanmuktasana* (wind release pose) etc.

Amongst all given *asanas*, the most important are the sun salutation and corpse pose. Both these *asanas* are very effective in mental disorders. The corpse pose helps the patient to calm his stress levels and relaxes the body and mind¹⁵.

Along with *asanas*, we can also advise the *Pranayama* exercises to these patients. *Anuloma-viloma Pranayama*, *Sheetali Pranayama*, *Surya bhedana* (right nostril breathing) and *Chandra bhedana Pranayama* (left nostril breathing) are found to be helpful¹⁶. *Pranayama* help to

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attain the vital capacity to the lungs and it increases the vital energy (*Prana*) of the body. It also helps to reduce the stress level and alleviate the depressive state¹⁷. Another specific type of *Pranayama* is *Sudarshana kriya* and this is found to be very helpful in stress and mental disorders¹⁸.

One important fact to be noted here is that all these *asana* are prescribed to the

patients who are anti-psychotics stabilized. Many of the randomized control trials accessing the role of yoga in schizophrenia are done on anti-psychotic stabilized patients^{19,20,21}. The main reason for this selection is the practical difficulty in implementation of yoga in patients who are suffering acute psychosis attacks.

CONCLUSION

Current researches suggest that schizophrenia is a disorder caused by a complex set of interrelated factors. When a person has schizophrenia, the world is no longer a certain place. A person is not able to distinguish the reality from the imaginary and often withdraw into themselves and refuses to interact with other people. Higher incidences of refractory cases are found in patients on antipsychotics alone. Yoga as an add-on therapy in schizophrenia has been demonstrated to be reasonable and effective. Yoga can also be used as an

effective tool to combat the adverse effects in schizophrenic patients due to antipsychotics. It helps to improve the thought process, reduces mental conflict state and reduces intensity of negative symptoms. Current research into schizophrenia and yoga has remained highly fragmented, much like the clinical presentation of the disease itself. Although there are several studies that claims the role of yoga therapy in management of schizophrenia, but still more strong clinical evidences are needed to further understand the role of yoga in mental disorders.

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