

Anuloma-Viloma Pranayama and Anxiety and Depression among the Aged

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Anxiety and depression are two most common mental problems facing the aged and are often ignored. In a vast country like India, particularly the rural India where little mental health facilities are available, these people are little taken care of with regards to their mental health. However, our very own system of yoga holds so much promise for these sufferers. The present study is an attempt to find out the impact of pranayama on the anxiety and depression of the senior citizens living in the rural community. For the study, 30 senior citizens of Madhubani town have been selected. Their level of anxiety and depression were measured on Sinha Anxiety Scale and Beck Depression Inventory prior to their enrolment in Yoga sivr (camp) of 7 days duration where they were trained in anuloma-viloma technique of pranayama. Their level of anxiety and depression were again measured after 3 months during that period the subjects regularly practiced the pranayama. The comparison of the two scores showed significant impact of the pranayama on their anxiety and depression.

Keywords: Anxiety, Depression, Anuloma-Viloma Pranayama,

Late life depression and anxiety have been identified as some of the most common mental health problems affecting elders. It is estimated that by the year 2020 depression will have risen from fourth to second amongst health conditions worldwide, taking into consideration associated disability and premature mortality (Murray, & Lopez, 1997). The prevalence of depression in the U.S. total population has been measured at 1% (Alexopoulos, Katz, Reynolds, Carpenter, & Docherty, 2001). However, nearly 16% Americans who are 65 years or older are estimated to be clinically depressed (Boswell & Stoudemire, 1996). Comparable figures have been offered for European elders (Copeland, et al. 1999).

Minor depression and other nonmajor forms of clinical depression are more

prevalent in elderly populations than is major depressive disorder. Reports of the prevalence of clinically significant depressive symptoms among community-dwelling older adults range from approximately 8% to 16% (Blazer et al. 2003). Tannock and Katona (1995) suggested that depressive symptoms or subsyndromal cases of minor depression are common among elderly persons. Blazer and Williams (1980) found that 14.7 percent of a community sample of persons older than 65 had "substantial depressive symptoms." Although major depression is the most studied and well-defined depressive syndrome, other depressive subsyndromal disorders are also associated with significant functional impairment and disability. In this study we focus on clinically significant geriatric depression that does not meet established criteria for major depressive disorder.

The magnitude of mental morbidity in the Indian situation is a serious cause of concern. In India, nearly 4 million elderly persons (age 60 and above) are mentally ill (Dhar, 2005), which, although lower than in western countries, requires to be taken seriously as the necessary psychiatric services fall woefully short of our requirements. Tiwari and Srivastava (1998) conducted a study in Lucknow to assess the prevalence of psychiatric illness in persons 60 years and above in a defined rural community. The total prevalence of psychiatric disorders in the geriatric group was 42.21% and neurotic depression, MDP depressed and anxiety states were the most prevalent.

Studies have shown that among elderly, anxiety disorders occur two to seven times more often than depression problems. This suggests that anxiety disorders are real and relatively common problems among elderly. The prevalence of anxiety in community samples ranges from 1.2% to 15%, and in clinical settings from 1% to 28%. The prevalence of anxiety symptoms is much higher, ranging from 15% to 52.3% in community samples, and 15% to 56% in clinical samples (Bryant, Jackson & Ames, 2008). Older adults are more susceptible to experience depression along with an anxiety disorder.

There are several possible reasons why anxiety disorders have not achieved prominence in the field of geriatric psychiatry. Despite their frequency in the community, late-life anxiety disorders per se are not common in mental health settings. They are usually comorbid with major depressive disorder, and the depression is usually the primary reason for referral and the primary focus of treatment. A fairly common manifestation of anxiety in late life is a cluster of symptoms characterized by anxious mood; tension; and diffuse somatic complaints, such as dizziness, shakiness, and nausea.

Depression in later life frequently coexists with other medical illnesses and disabilities. It can be triggered by a range of long-term illnesses to which later life is particularly prone, such as diabetes, stroke, heart disease, cancer, chronic lung disease, Alzheimer's, Parkinson's, and arthritis. Alongside physical conditions that accompany depression or conducive to it, multiple social factors may worsen elders' psychological conditions. Such factors include the loss of family members, friends, work, and social status—all changes that emphasize the relative lack or loss of control associated with this stage of life. Depression among the elderly often goes undiagnosed. It is associated with chronic physical illness; symptoms of depression are also a common side effect of prescriptive medications including anti-hypertensive drugs.

Our cultural ethos gives a special place to the elderly as wise people and counsellors of society. Both geriatric support and social engineering aimed at improving the competence of the elderly and ensuring their active participation in society should be considered together in evolving any policy on ageing care. The experience and wisdom of old age is a treasure for any society; its gainful utilization would be beneficial for both the elderly as well the entire society. This can be achieved only by adding "life to years" and not just "years to life".

The regular practice of Pranayama can be quite effective in not only overcoming anxiety and depression among the elderly but also help them in promoting mental health which will help them develop a sort of resilience to any kind of mental or physical illness. Pranayama is commonly used to describe various yogic breathing exercises that help give the practitioner control of the life force, or pranayama. Pranayama has been reported to be beneficial in treating a range of stress related disorders, improving autonomic functions, relieving symptoms of asthma, and reducing signs of oxidative stress.

Practitioners report that the practice of pranayama develops a steady mind, strong will-power, and sound judgment, and also claim that sustained pranayama practice extends life and enhances perception.

Alternate-nostril breathing (Anuloma-Viloma Pranayama) consists of slow deep quiet breaths using one nostril at a time (Samskrti & Franks, 1978; Satchidananda, 1970). The thumb or ring finger is used to close off the other nostril. Three variations exist, depending on when the nostrils are switched. In the present study, the active nostril is switched after each inhalation.

Objective:

The objective is to find out the impact of pranayama with particular reference to anuloma-viloma pranayama on the anxiety and depression of the aged people. With the ageing of the population we will have a large population of the elderly in our society. With aging comes along a lot of physical and mental problems. We have not developed a proper system of taking care of them and with the gradual degradation of joint family system the aged are at times left with none to take care of. So the need of the hour is to create awareness among the aged of their health and promote their health so that life can be added to the years and not just years to life. The objective of health promotion is to "healthy dying" so that they can remain as independent as possible and having as much control over their lives as possible.

Our very own system of yoga has proved to be a very effective system in the amelioration of various physical illnesses. However, few studies have been done to find the efficacy of yoga in the treatment of mental disturbances. The efficacy of yoga and its various techniques like pranayama can prove to be a useful way to minimize the psychological distresses like anxiety and depression of the individuals.

Hypotheses:

- i. Anxiety decreases with regular anuloma-viloma pranayama among the aged.
- ii. Depression decreases with regular anuloma-viloma pranayama among the aged.

Method

Sample:

It consisted of 30 males in the age range of 60 to 70 years. This included retired persons getting enough pensions to support themselves. All of them came from multi-generational homes and their spouses were still alive and living with them. They all were purposively selected.

Tools:

Beck Depression Inventory: Depression levels were assessed with the Beck Depression Inventory (Beck, 1970), the most commonly used self-report measure of depression.

Sinha W-A Self-analysis Form (Durganand Sinha -1968): Anxiety levels were assessed with the Sinha W-A Self-Analysis Form. The Self-Analysis Form has a total of 100 items of the "yes-no" type. Manifestation of anxiety being multidimensional, the test was developed which could tap the various areas of manifestations of anxiety: (1)health, appearance and injury, (2)areas of ambition, (3) family anxieties, (4) anxieties regarding friendship and love, (5) social relations and social approval,(6)worries regarding the future, (7) worries about civilization, war, virtue, (8) guilt and shame, (9) Physical and physiological manifestations, and (10) purely psychological manifestation. The test has been found to be high on reliability and validity.

Procedure:

They participated in a yoga training camp for 7 days. The subjects were measured on anxiety and depression inventory with the help of the above mentioned scales before the

training of pranayama. The subjects were then followed up for the next three months and were motivated to continue the practice of the pranayama they had learnt during the training sessions.

Results and Discussion

Table 1: Comparison of anxiety and depression under before and after training in Pranayama (n=30)

Group	Before Pranayama		After Pranayama		t
	Mean	SD	Mean	SD	
Anxiety	35.53	12.36	23.57	9.83	13.91*
Depression	27.96	12.76	15.63	10.23	14.09*

*p>.01

The mean score of the samples on anxiety on Sinha Anxiety Scale before the training of anuloma-viloma pranayama is 35.53 with an SD of 12.36 whereas the mean score after 3 month of the training of the pranayama on the anxiety scale is 23.57 with an SD of 9.83. The difference between the two conditions before and after the training of the pranayama is significant suggesting that there is significant decrease in the level of the anxiety of the aged suggesting the impact of pranayama on anxiety among the elderly.

The mean score of the samples on depression on Beck Depression Inventory show a significant difference as the samples got a mean of 27.96 and an SD of 12.76 prior to the training of the anuloma-viloma pranayama as compared to the post-training condition where the samples' got a mean score of 15.63 and an SD of 10.23. The difference between the two conditions suggests a significant improvement in depression among the people doing pranayama.

Thus, the result of the study supports the formulated hypothesis. The effect of pranayama was evident from the scores from the comparison between the two conditions namely before and after pranayama suggesting that pranayama has an important

role to play on the perceived mental health of the elderly.

Pranayama has been found to help build that cheerful body-mind relationship, first by de-stressing the mind and then by freeing the body of its ailments. Vinod Kochupillai says that Pranayama work wonders for the human body, ridding it of all depressive energy and body tensions. Correct breathing can prevent most ailments. "In this process we are transported to our very source - called the pure consciousness. Once one is in a state of pure consciousness, day-to-day worries and tensions disappear and the body begins to heal," says Dr. Kochupillai. "When one is going through a stressful situation, the whole physiology; the brain and endocrine system, is influenced negatively. Breathing techniques Pranayama establish a positive body-mind relationship. Removal of negative thoughts and tensions leads to a positive and healthy physiology.

The most influential evidence for pranayama as a viable treatment for depression derives from research conducted by the National Institute of Mental Health and Neuroscience in India. According to the study, up to 73 percent of participants with depression saw a significant improvement when practicing Sudharshan Kriya Yoga (SKY), a pranayama technique. This method, also referred to as "The Healing Breath Technique", involves breathing with a natural breath through the nose, mouth closed, in three distinct rhythms. It is, essentially, rhythmic hyperventilation. Studies suggest that regular practice of SKY lowers levels of triglycerides in the blood, significantly increases antioxidant capacity, marginally reduces oxidative stress, improves sleep, and increases an individual's overall sense of well-being. To date, there have been no significant side-effects reported.

Review of the literature of Yoga research (Anantharamana, & Sutranayams, 1997)

concludes, "In summary, this review of the literature suggests that Hatha yoga has potential as a useful intervention for improved physical well-being, reducing anxiety, and enhancing personality development....Hatha yoga could be a helpful adjunct to medical and psychological treatment when practiced regularly by clients on their own to improve feelings of physical health, reduce their anxiety, and enhance their self-concepts and emotional tone." The breathing practices, or pranayama, are one component of hatha yoga, which is intended to give one a healthy body and mind.

Thus, it can be concluded that pranayama helps in the reduction of the anxiety and the depression level of the individual and elderly as well. This might prove to be a useful adjunct to medications and at times it may act as the only form of treatment. The findings would have a significant impact in our sociocultural context as people from rural areas are mostly poor and lack necessary medical care and our indigenous method of pranayama is not only cheap but also effective in the treatment of various mental and physical distresses. Yoga has not only been found to be preventive in nature but also promotive as it increases the human potentials and improves the immune system of the individuals.

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