

## Role of Yoga in Geriatric Psychiatric Disorders

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### Introduction:

Yoga is a practical spiritual science that empowers an individual to attain a state of integrated and holistic development at all levels. Many studies have now documented the scientific basis of its potential to normalise psycho-physiological function. Though Yoga is first and foremost a *moksha shastra*, one of popular by-products of a Yogic way of living is the attainment of a dynamic state of health and well being. This of course depends on the individual's *sabija karma* that manifests as their genetic predispositions as well as the environment into which they are born.

The central theme of Yoga is the golden mean, finding the middle path, a constant search for moderation and a harmonious homoeostatic balance. Yoga is the "unitive impulse" of life, which always seeks to unite diverse streams into a single powerful force. Proper practice produces an inner balance of mind that remains stable and serene even in the midst of chaos. This ancient science shows its adherents a clear path to the "eye of the storm" and ensures a stability that endures within, even as the cyclone rages externally.

### Geriatric Psychiatric Disorder:

Geriatric psychiatry is the branch of clinical medicine dedicated to the study and the care of mental disorders in older adults. Such disorders include dementia, depression, delirium, other forms of cognitive impairment and behavioural disturbances, psychosis, anxiety, substance abuse, and sleep disorders.

The most common psychiatric syndrome in the elderly is dementia of varying degrees. Psychotic ideation (usually paranoid) may coexist with dementia. Frequently, in milder cases, the individual is aware of the deficiency in cognition and becomes depressed about actual or threatened loss of function. Depression may then amplify the apparent cognitive decline.

Some of these problems may have come on only in the later years; others may have begun in middle age or even have been life long. Their causes can range from brain diseases, to diseases or conditions of other parts of the body, to adjustment problems or other emotional / psychological problems.

The treatment of these problems begins with the proper diagnosis, and requires not just expertise in geriatric psychiatry but also knowledge of geriatric medicine, neurology, gerontology, abnormal psychology, and psychopharmacology. Often a multidisciplinary approach is needed, involving coordination and teamwork among the primary care physician, psychiatrists, and other specialists.

Socialization, a structured schedule of activities, familiar surroundings, continued achievement, and avoidance of loneliness (probably the most important factor) are some of the major considerations in prevention and amelioration of the psychiatric problems of old age. The patient can be supported in the primary environment by various agencies that can help avoid a premature change of habits.

For patients with disabilities that make it difficult to cope with the problems of living alone, homemaker services can assist in continuing the day-to-day activities of the household; visiting nurses can administer medications and monitor the physical condition of the patient; and geriatric social groups can help maintain socialization and human contacts.

### **Role of Various facets of Yoga:**

Our Guru Swami Gitananda Giri Guru Maharaj used to say, “A nervous breakdown is actually an opportunity for a spiritual breakthrough if we can realise the positive implications in our moment of despair and dejection”. The teachings of the *Yoga Vasishtha* and the *Bhagavad Gita* (the first and second recorded ‘psychological counseling’ sessions in human history) were delivered when both Lord Rama and Arjuna respectively were at the depths of their depression. If we can realise that this is indeed a window of opportunity for growth, success will come to us the soonest. On the other hand if we miss this golden chance, then even the Divine will struggle to help us out of our own deep pit of self pity.

The science of Yoga has numerous practical techniques as well as advice for proper life style in order to attain and maintain health and well being. *Bahiranga* practices such as *yama*, *niyama*, *asana* and *pranayama* help produce physical health while *antaranga* practices of *dharana* and *dhyana* work on producing mental health along with *pratyahara*. Yoga works towards restoration of normalcy in all systems of the human body with special emphasis on the psycho-neuro-immuno-endocrine axis. In addition to its preventive and restorative capabilities, Yoga also aims at promoting positive health that will help us to tide over health challenges that occur during our lifetime. This concept of positive health is one of Yoga’s unique contributions to modern

healthcare as Yoga has both a preventive as well as promotive role in the healthcare of our masses. It is also inexpensive and can be used in tandem with other systems of medicine in an integrated manner to benefit patients.

### **Becoming one with the Breath:**

In the science of Yoga, body movement and breath must be synchronized. The breath pattern is important. Particularly in the use of *kriya* or structured movements like *surya namaskar*, the body is normally lifted on an incoming breath and lowered on an outgoing breath. Some of the breath patterns such as the *bhastrika* strengthen the whole solar plexus area as well as the diaphragm, building up stamina while producing internal cleansing of organs and the blood stream. *Kapalbhati* is another dynamic technique that enables us to break out of the deep hole of depression by creating a sense of activation. *Surya nadi* and *ujjayi pranayama* can also help in activating those who need the activation for healthy well being. The *bandha trayam* as well as the *aswini mudra* are both a God-send for those suffering from depression as they revitalise the entire psycho-neuro-endocrine system. The *pranava* and *bhramari pranayama* work towards creating an inner harmony that results in the attainment of a state of mental calmness thus allowing inherent regenerative processes to begin operation.

Swami Gitananda taught that there is an absolute and direct correlation between the way an organism breathes and its energy level. There is also a direct correlation between the way we breathe and our life span. The way we breathe also affects our state of mind and clarity of thought along with the quality of emotions we experience. In fact there is an absolute and direct correlation between the way we breathe and the subtlety of the thoughts that pass through our mind.

### **Shifting from Individuality to Universality:**

Yoga, which emphasizes the universal, is a perfect foil to those modern human activities, which glorify the personal. The ego which is fixated only on its own shallow self will soon run into the blank wall of depression and despair, overwhelmed by its own superficiality. That striving spirit which looks within at the universal aspect of its own nature and sees the oneness of the whole of creation will find an endless fountain of inspiration and joy. In short it may be safely said that the practice of Yoga as a unified whole helps the individual shift from an 'I'-centric approach to a "WE"-centric approach.

When we live Yoga as a way of life we become immensely conscious and aware at the physical, mental and emotional levels. We thus gain control through that consciousness over all aspects of our life. This is in part also due to a cultivated detachment, an ability to work for "work's sake," and not for the sake of reward. Such an attitude of mind produces consummate skill in all actions. Consummate concentration and control are offshoots of a good *sadhana*. Detachment from the fruits of the action produces the greatest efficiency, for one is then emotions connected with "goal-oriented", competitive thinking. The beauty of Yoga is that these abstract principles become concrete in the daily practice of the techniques available in the Yoga system. Once the "seed of Yoga" finds fertile soil, these concepts grow naturally, slowly but surely taking root in all aspects of life.

### **Holistic Approach of Yoga:**

The Yogic wholistic approach to life that 'everything is important and everything has its effect' could do much to improve the mind, body and emotional states of well being. These practical approaches to health include the use of early morning

sunlight for healing and rejuvenative activities, the use of water for internal and external cleansing and careful attention to the diet. Yoga enables us to realise the necessity for balance between exertion and relaxation. All tension must be balanced using concept of *spanda nishpanda* or "exertion-relaxation-exertion-relaxation" in an alternating rhythm of activity. We begin to learn how to "unwind" through the many relaxation techniques available in Yoga that balance the stress and strain of our day-to-day life

A Yogic life includes becoming aware of the effect of modern modes of entertainment and addictive habits in general debilitation of the physical, emotional and mental nature. It also provides a "working philosophy" that helps sustain us in both triumph and defeat. The increased self-awareness obtained through yoga makes us sensitive to our own bio-rhythms including both the physical as well as the mental and emotional cycles. In short, all of these aspects of Yoga as a way of natural living can provide relief for many of the psychosomatic ailments affecting humankind today.

### **Cultivating of Positive Health:**

According to Yogacharini Meenakshi Devi Bhavanani, Director ICYER at Ananda Ashram in Pondicherry, Yoga has a step-by-step method for producing and maintaining perfect health at all levels of existence. She explains that social behaviour is first optimized through an understanding and control of the lower animal nature (*pancha yama*) and development and enhancement of the higher humane nature (*pancha niyama*).

The body is then strengthened, disciplined, purified, sensitized, lightened, energized and made obedient to the higher will through *asana*. Universal *pranic* energy that flows through body-mind-emotions-spirit continuum is intensified and

controlled through *pranayama* using breath control as a method to attain controlled expansion of the vital cosmic energy. The externally oriented senses are explored, refined, sharpened and made acute, until finally the individual can detach themselves from sensory impressions at will through *pratyahara*.

The restless mind is then purified, cleansed, focused and strengthened through concentration (*dharana*). If these six steps are thoroughly understood and practiced then the seventh, *dhyana* or meditation (a state of union of the mind with the object of contemplation) is possible. Intense meditation produces *samadhi*, or the enstatic feeling of Union, of Oneness with the Universe. This is the perfect state of integration or harmonious health.

The senior years are a testing time as many physical, emotional, mental, financial and social challenges begin to surface and confront the elders in an unpleasant manner. Following the Kriya Yoga of Maharishi Patanjali with an understanding of *tapa* as a disciplined facing of the challenges of senior life, *swadhyaya* as introspectional self analysis and *ishwara pranidhana* as doing one's best and leaving the rest can help our Silver Citizens develop and maintain a healthy and harmonious state of being during the challenging end years of their life. Patanjali promises us Samadhi through the adoption of Kriya Yoga and for the silver citizens this high state of mind will enable them to be at the very peak of their existence when it is time for them to leave this world.

Adoption of a healthy Yogic lifestyle with cultivation of the *karma yoga*, *bhakti yoga* and *raja yoga* principles in daily life will help create a sense of inner happiness and reduce the friction that tends to build up in families during the senior years.

### **Some simple Yogic Technique for the Elderly:**

Senior citizens need to have adequate rest and must avoid straining their joints and musculature as damage to the body then results in the spiralling of the somato-psychic challenges. It is important to counsel the elderly patients to avoid high-impact activities and not to lift heavy objects. The application of warm fomentation of the neck and other joints region can be advised to reduce pain and discomfort. The importance of taking short breaks while driving, watching TV or working on a computer as well as importance of healthy overall posture with neck aligned to shoulders and spinal column need to be inculcated.

Gentle stretching and strengthening practices such as *jattis*, *sukshma* and *sthula vyayama* and other breath-body movement activities can help to restore psychosomatic harmony that is a root cause of many health problems. These can be usually done by most of the seniors and is a good way to introduce the yoga practices in a gentle and safe manner in the initial stages. The use of gentle *hatha yoga kriya-s* helps facilitate psychosomatic balance. This includes practices such as the *chatus pada kriya*, *ardha kati chakra kriya*, *pawan mukta kriya*, *chri kriya*, *sethu kriya* and the *vyagraha pranayama* with awareness of the spinal movements with the conscious rhythmic breathing.

The thymus gland is vital for proper functioning of the immune system and twisting postures create a healthy flow of *prana* into the *anahata chakra*. Some simple examples are *vakra asana* and *bharadwaja asana*. *Paryanka asana* has beneficial healing properties for the thymus gland when used with the *hastha mudra* sequence as taught by Dr Swami Gitananda Giri.

Neck pain and upper back pain are common complaints in the elderly often incapacitating them to a great extent. The *brahma mudra* when done with the breath sequences and appropriate *nada* or vibrational sounds such as *AAA*, *OOO*, *EEE* and *MMM* can relax and energize the neck region and relieve the frequent occurrences of a, “pain in the neck”. This also energises the whole central nervous system with a healthy flow of *prana* resulting in beneficial effects in self confidence, mood and memory.

For the seniors it is useful to work with a partner in Yoga practices for betterment of physical, emotional and mental health. This includes simple aspects such as helping to push a bit more in forward bending postures, supporting the partner in the back bending postures, helping to improve the range of joint movement in different practices and giving isometric resistance to the movement in the postures to improve strength of the musculature.

*Pranayama* is an important link between the body, emotions and mind. There are simple *pranayama* techniques that can help to reduce the prevalent stress and bring about psycho-neuro-immuno-endocrine balance and harmony essential for overall health and well being. Some of these are *vibhagha* and *pranava*, *nadi shuddhi*, *bhramari* pranayama and *chandra nadi pranayama* that also helps reduce blood pressure and blood sugar levels. They also help reduce ‘over reactions’ to their day-to-day tensions thus enabling the senior citizens to relax better resulting in better quality of sleep as well as enhanced quality of life,

Yoga relaxation helps to relieve the stress and produce autonomic balance thus helping correct numerous psychosomatic conditions that are prevalent in older age. *Shavasana* with *savitri pranayama*, *spandha-nishpandha kriya*, *kaya kriya*,

*tala kriya* and *yoga nidra* are very useful in this regard. The relaxed state is ‘the’ state in which healing, regeneration and recuperation can occur. This “state of relaxation” is vital to maximise our inherent healing potential if we are to restore normalcy at the physical, emotional and mental levels.

The inner aspects of *dharana* and *dhyana* help normalize the higher functions and modulate the individual perspectives thus cultivating a positive and proper attitude towards life. These practices include the *brumadhya drishti tratata* and *prana kriya* to activate the *ajna chakra* and energize the neuro-endocrine axis, the *mandala dharana* and *chakra dhyana* with special emphasis on the *anahatha chakra* to activate the thymus and *ajna chakra* to normalize the neuro-endocrine axis. Other important practices include the use of *japa* in the form of *om japa* and *ajapa japa* focussing on the *hamsa-soham mantra*.

#### **Some Study on Yoga and Psychiatry:**

A study by Lavey R et al (2005) using in-patients in a psychiatric hospital showed that practice of Yoga was associated with improved mood leading to the suggestion that Yoga may be a useful method to reduce stress during in-patient psychiatric treatment.

A randomised control trial by NK Manjunath (2005-06) reported improvement in various psycho-physiological parameters in a geriatric population following 6 months of an integrated Yoga programme comprising physical postures, breathing exercise, guided relaxation and devotional sessions for 60 minute a day six days a week. There was improvement in semantic, primary and working short term memory as well as episodic memory. It was also noted that depression scores and self rated quality of sleep showed improvement after the study period. These changes were attributed to

the possible reduction in anxiety and distractibility as well as the increased secretion of “feel good” hormones such as endorphins and reduced secretion of stress hormones. Interestingly the wait list control group actually showed deterioration in different aspects of functioning.

According to Karel Nespor, a Czech psychiatrist (1993) the lack of suitable physical activity and stimulation are common problems in geriatric psychiatry. For his experience of using Yoga in psychiatry he has found that gentle joint exercise and relaxation are well accepted by the patients and are found to be beneficial. He has suggested that Yoga can enhance one’s spiritual life and the perspective beyond the physical life regardless of one’s particular religion. In his article he has given a detailed outline of the potential benefits of Yoga in alcohol and drug abuse. According to him Yogic techniques especially those of the relaxation and meditative variety contribute to relieving stress, anxiety and depression. It also provides a safer social network as most of those practising Yoga are not inclined to drug or alcohol abuse. The increased self awareness and improved self control of both the mental and physical nature opposes the feeling of helplessness often found in patients of abuse these problems. Yoga also reduces the use of addictive analgesics as it provides a safer, non pharmacological management of psychosomatic problems such as insomnia, headaches and general bodily pain. Yoga also helps those trying to come out of substance abuse by enabling them to overcome the stress of early abstinence after the withdrawal symptoms.

A study by R Sharma et al at AIIMS, New Delhi in 2008 had concluded that even a short lifestyle modification and stress management educational program of only

ten days could lead to a remarkable improvement in subjective wellbeing scores of patients of various conditions thus making an appreciable contribution to primary prevention as well as management of lifestyle diseases.

A study by Shapiro D et al in 2007 suggested Yoga as a promising intervention for depression as it is cost-effective and easy to implement. They also suggested that it produces many beneficial emotional, psychological and biological effects, as supported by significant reductions in depression, anger, anxiety, neurotic symptoms and low frequency heart rate variability with improvement in mood. 11 of the 17 patients who completed the programme achieved remission levels post-intervention. Participants who remitted differed from the non-remitters at intake on several traits and on physiological measures indicative of a greater capacity for emotional regulation.

Studies by Sharma VK et al (2006) and Krishnamurthy MN and Telles S (2007) have also shown the efficacy of yoga in managing depression. The study by Sharma VK demonstrated that Sahaj Yoga in addition to improvement in various other cognitive domains seen with conventional anti-depressants led to additional improvement in executive functions such as manipulation of information in verbal working memory and added improvement in attention span and visuo-motor speed of depressives. The study by Krishnamurthy MN and Telles S reported that an integrated approach of Yoga including the mental and philosophical aspects in addition to the physical practices was useful for institutionalized older persons.

The mechanism of the action of yoga can be explained by increased GABA levels in the brain following Yoga sessions that

have been demonstrated by Streeter CC et al in 2007 enabling a better understanding of the potential role of yoga in management of low GABA disorders such as depression and anxiety. Another recent study by Streeter CC and colleagues (2010) reported greater improvement in mood and anxiety with a 12-week yoga intervention as compared to a metabolically matched walking exercise programme. They have demonstrated that increased thalamic GABA levels are associated with improved mood and decreased anxiety. They also claimed that this was the first time a behavioral intervention (yoga postures) has been associated with a positive correlation between acute increases in thalamic GABA levels and improvements in mood and anxiety scales.

There has been extensive work done on Sudarshan Kriya Yoga (SKY) and depression at NIMHANS (www.aolresearch.org). The antidepressant efficacy of SKY has been demonstrated in dysthymia in a prospective, open clinical trial that compared the relative antidepressant efficacy of SKY in melancholia with two of the current standard treatments, electroconvulsive therapy (ECT) and imipramine (IMN). Although the effect of SKY was inferior to ECT, it was suggested on the basis of the study that SKY be recommended as a potential alternative to drugs in melancholia as a first line treatment.

#### **Role of Yoga in Charging of Caregiver:**

The family members who are left to care for the geriatric patients with dementia have an extremely difficult and stressful job. This also becomes harder as the disease progresses. It has been found that dementia caregivers spend much more time on care giving than do people providing care for patients of other illnesses. There is a great physical, mental, emotional and economical strain with

reduced time for rest and recreation in such caregivers. As a result it is common to find feelings of anger, resentment, guilt, and hopelessness in such persons that deepens their sorrow for their loved one and for themselves. Depression is an extremely common consequence of this spiral of sorrow. Support groups are important and some may even require medication for their depression etc. Yoga has a great role to play in helping such caregivers reduce their tension and stress and also helps them develop a positive outlook and attitude towards life in general and in particular towards the recipient of their care. Concepts of *karma*, *dharma* and *seva* are vital and the fountainhead of yogic philosophy enables them to develop an inner strength that carries both them as well as the patient towards a better 'state of being'. A pilot study of a Yoga based intervention for dementia caregiver stress by Waelde LC et al (2004) suggested that a Yoga-meditation programme may be a feasible and effective intervention for family caregivers and may improve affect, coping, physical well-being, and stress management. They reported reductions in depression and anxiety and improvements in perceived self-efficacy following a six-session manualized Yoga-meditation program designed to help the caregivers cope with stress. The majority of caregivers found the intervention useful and reported subjective improvements in physical and emotional functioning.

#### **Practical issue in Integrating Yoga with Psychiatry:**

Compliance of the patients is a major issue that needs to be dealt with as even with patients of other medical conditions, compliance is difficult. This requires a lot of effort on the part of the treating doctor as well as the therapist and the family members must be included in the whole exercise. Often the patients are disinterested and great effort needs to be

taken to create an interest for yoga as a way of life.

The social and family support of the patient needs to be worked on. This is one of the main stays of any long term management strategy and if neglected will not produce any positive results. Group sessions with family members and with the social network will enhance the quality of the yoga therapy being given to the patient. Care givers need to be integrated into the training and therapy programmes if the therapy protocol is to manifest the anticipated beneficial effects.

Attitudes of the treating doctors are of vital importance for if the doctors are not personally convinced about the usefulness of yoga, then they will never pass it on to the patients. General disinterest in advocating yoga as well as strong opposition is often found in the medical fraternity and this will hinder the integration of yoga with modern medicine.

Tendency of the patients to over exert themselves in their enthusiasm and due to a sense of competitiveness that occurs in group sessions. Proper yogic counselling and a stressing of the fact that they need to just do their best without worrying about the performance of others in the class. Individual personalised therapy sessions are very useful in this regard too as the patients can then go at their 'own speed' rather than try to catch up with 'others'.

There is a lack of competent Yoga therapists and standard yoga therapy protocols in regards to managing different medical conditions and this is even more apparent when we consider yoga therapy for psychiatric disorders. Yoga therapists need a minimum of 2 years regular training and then there has to be some speciality training for handling psychiatric conditions before they can be considered to be "ready" to manage such patients. Of course when it comes to handling elderly

patients the most important qualities required are empathy, respect and a 'real' caring attitude.

### **Conclusion:**

The dedicated practice of Yoga as a way of life is no doubt a panacea for problems related to psychosomatic, stress related physical, emotional and mental disorders and helps us regain our birthright of health and happiness. It is only when we are healthy and happy that we can fulfil our destiny. With the adoption of a proper attitude and lifestyle through the Yogic way of life, we can rise above our own circumstances and old age, despite the physical limitations, can be a time of variety, creativity, and fulfilment.

So many great Yogis even in modern times such as Yogamaharishi Dr Swami Gitananda Giri, Sri Yogendraji, Sri Yogeshwarji, Yogashri Krishnamacharya, Sri Kannaiah Yogi, Swami Suddananda Bharathi, Sri Pattabhi Jois and Padma Bhushan BKS Iyengar have shown us through their living example that its is possible to grow old without losing any of the physical, emotional or mental faculties of youth.

Though the process of aging is irreversible and inevitable, the ability to learn and adjust is with us throughout our life. This ability to choose the right attitude is strongly influenced by our interests, activities, and motivation. The adoption of a healthy diet and positive habits with regular exercise along with the avoidance of negative habits will help our 'Silver Citizens' retain their mental ability and prevent degenerative disorders.

The *kriya yoga* of Maharishi Patanjali with an understanding of *tapa* as the challenges of senior life, *swadhyaya* as introspectional self analysis and *ishwara pranidhana* as doing one's best and leaving the rest can help our Silver Citizens develop and maintain a healthy



and harmonious state of being during the challenging end years of their life.

There are so many who have benefited by the life enhancing qualities of Yoga as a way of life. Many of them were in the depths of despair and on the verge of committing suicide before they came to Yoga. Today after many years of *sadhana* coupled with the adoption of the *yoga bhavana* (Yogic attitudes) they have not only climbed out of the 'deep self-made well' of depression but are guiding others

too. Some of them have become beacon lights to hundreds of their fellow human beings and are enabling them to come out of their shells and shine bright as stars.

A lighted lamp gives off more light when it 'shares' itself by giving to other lamps thus enlightening the universe. So also, these harmonious human beings are spreading the 'Joy of Yoga' all over the world and in doing so fulfilling their destiny. May we all grow old gracefully through Yoga, the mother of all sciences.

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