INTRODUCTION

The twentieth century has witnessed an evolutionary explosion. Progress in technology and medicine has been very rapid making life easier and more comfortable. Surgery has advanced to such an extent that replacement of essential organs is possible now. All these advances suggest that man should be very happy today. Is it true? The present chaotic conditions of living are playing havoc on his mind. Instead of feeling and looking happy many people today look defeated, tired, morose or anxious, needing pills to go to sleep, pills to move their bowels and pills to keep them calm. All these artificial methods provide no solution to the existing problems, they only give temporary relief.

Yoga is a great boon to civilized man. Yoga is a way of life, says Swami Gitananda Giri Guru Maharaj, which can make a person rediscover his best in life. The practice is calming and provides a rare opportunity in our chaotic lives to leave the outside world behind and be at peace, helping one to focus inwards. Yoga is a spiritual science for the integrated and holistic development of physical, mental and spiritual aspects of our being. The recent advancement in the field of research has proved that Yoga normalizes physiological and psychological functioning of man controlling the disturbances before they become powerful enough to cause breakdown. WHO defines health as "The state of complete physical, mental and social wellbeing and not merely absence of disease or infirmity" and Yoga is the vital tool that helps attain that state. The important aspect is that of "being" healthy as well as "feeling" healthy. The qualitative aspect of health is considered important in Yoga and other Indian systems of medicine.

_Hatha Yoga Pradipika_, states that "Yoga improves the health of all alike and wards off diseases of one who tirelessly practices Yoga whether they are young, old, decrepit, diseased or weak, provided they abide to the rules and regulations properly". Yoga can also be performed by those with acute or chronic and painful disabilities, those who suffer from chronic illnesses and those with missing limbs too. Yoga has never recognized any barriers of age, sex, religion, or creed.

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WHAT IS AUTISM

• Autism is one of the most common developmental disorders.
• It is a life-long brain disorder that is normally diagnosed in early childhood.
• People with autism have difficulties communicating, forming relationships with others and find it hard to make sense of the world around them.
• Autism is a spectrum disorder varying in severity and impact from individual to individual, ranging from those with no speech and severe learning disabilities to people with IQs in the average range who are able to hold down a job or start a family.
• People with autism may also have unusual patterns of language development, narrow interests and engage in repetitive and sometimes challenging behaviors.
• Asperger’s Syndrome is a form of autism in which speech development and IQ are normal, but in which social disability can be compounded by depression and mental health problems.
• Some people with autism demonstrate significantly challenging behaviours; most need specialist support and care.
• Boys are four times more likely to be diagnosed with autism than girls.
• Autism affects people of all racial, ethnic and socio-economic backgrounds.

THE IMPACT OF AUTISM

The emotional impact of autism is often difficult and sometimes devastating for people with autism and the families of those affected, but they cope well with the additional challenges it brings. The levels of mental health problems and depression are high as individuals struggle to cope in everyday society. Many argue that people with autism should be regarded simply as 'different' rather than 'disordered', there is no doubt of the real distress that autism can cause. People with autism and learning disabilities may have no speech or may have other complexities and may need full-time care.

For the individual with autism, the world can be a confusing and lonely place, where everyone except them understands the rules of appropriate behavior. For the family of an autistic child life is often stressful. Parents and siblings usually have to cope with unyielding challenging behaviour and possibly sleep deprivation, as many children with autism do not sleep for long periods of time. As the children
and adults with autism find it difficult to manage in social situations, many families become isolated and experience extreme mental distress.

**TREATMENT**

There is no cure for autism; however, with appropriate treatment and education, many children with the disorder can learn and develop. Early intervention can reduce challenges associated with the disorder, lessen disruptive behavior, and provide some degree of independence.

Occupational therapy and physical therapy are sometimes used to treat autism. **Occupational therapy** helps improve independent function and teaches basic skills (e.g., buttoning a shirt, bathing). **Physical therapy** involves using exercise and other physical measures (e.g., massage, heat) to help patients control body movements.

**BEHAVIOR THERAPY**

**Behavior modification** often involves highly structured, skill-oriented activities that are based on the patient’s needs and interests. It usually requires intense, one-on-one training with a therapist and extensive caregiver involvement. Most types of behavior modification are based on the theory that rewarded behavior is more likely to be repeated than behavior that is ignored. This theory is called **applied behavior analysis (ABA)**.

**Sensory integration therapy** is a type of behavior modification that focuses on helping autistic patients cope with sensory stimulation. Treatment may include having the patient handle materials with different textures or listen to different sounds.

Social interaction is often affected by limited emotional development that is common in autistic patients. **Play therapy** is a type of behavior modification that is used to improve emotional development, which in turn, improves social skills and learning. Play therapy involves adult-child interaction that is controlled by the child.

**Social stories** can also be used to improve undeveloped social skills. Stories are designed to help autistic patients understand the feelings, ideas, and points of view of others, or to suggest an alternate response to a particular situation. They also may be used to help patients understand and cope with their own feelings. Behavioral therapists can teach caregivers how to develop social stories.
COMMUNICATION THERAPY

Communication therapy is used to treat autistic patients who are unable to communicate verbally, or to initiate language development in young children with the disorder. Speech therapy may be used to help patients gain the ability to speak.

Picture exchange communication systems (PECS) enable autistic patients to communicate using pictures that represent ideas, activities, or items. The patient is able to convey requests, needs, and desires to others by simply handing them a picture.

GENERAL CHARACTERISTIC FEATURES

- More in Boys than Girls
- Lack of communication
- Withdrawn and self-absorbed
- More interested in objects than people
- Repeat what we say like a parrot
- Problem with learning
- Limited eye hand co-ordination
- Prefers to stay alone
- Love animals
- Avoids eye contact
- Indifferent to what is happening around them
- Confusion over left and right
- Restless and hyper active
- Lack of concentration with very low attention span.

REASONS

- Inter relation marriages
- Very young age delivery
- Medicine from shops without consultations
- Mother not taking vaccines
- Mal nutrition
• Mental stress during first four months of pregnancy
• Delivery after the age of 35 - 40 for the mother and 45 - 50 for the father
• Family history

QUALITIES REQUIRED BY THE TEACHER

• Infinitely patient
• Concerned and compassionate
• Temperamentally suited
• Able to communicate on any level
• Flexible in approach
• Able to adapt to the level required by the students
• Must know their limitations
• Must have the desire to serve the special children
• Have the right understanding of the Yogic Practices and Techniques

YOGA FOR THE AUTISTIC

Yoga is one of the six schools of ancient Indian Philosophy. It is the practice that enables one to achieve higher levels of performance, bringing out the hidden potentials from within. Systematic Yoga practice will increase the physiological and psychological well being. The spine is stiff, thus producing much pain, which limits movement, imbalances co-ordination. They also have difficulty in concentration.

*When Yoga is implemented as Therapy, it is best when done on a one-to-one basis. There is limited human study of yoga therapy in children with autism. Better trials are needed to confirm these results.*

Basic Jathis and Kriyas may be given as a part of the warm up practices with Surya Namaskar. These help improve the flexibility of the body.

ASANAS: Asanas work on the muscles and the joints, creating space within the body’s structure to help increase circulation and improve flexibility. The physical functioning becomes more integrated and less stressful.
Postures to improve blood flow to the head: Postures like Viparitkarani, Sarvangasana, Matsyasana, Halasana and Suptavajrasana alternating with standing postures such as Padahastasana, Trikonasana, Padangushtasana helps increasing blood flow to the head region and may help activating the brain cells. Balasana or Nikunjasana, Mehruasana and Dharmikasana are also useful.

Postures to increase concentration: One legged balancing postures such as Vrikshasana, Rathacharya, Natarajasana and Ekapada Asana are useful to improve concentration. Children have to be helped by the parent or the instructor to maintain these postures.

Postures to improve confidence and the body stance:

Back bending postures such as Bhujangasana, Ushtrasana, Chakrasana, Dhanurasana that opens the shoulders and the chest region are useful for improving their self confidence and also their body stance.

Simhasana improves stammering, stuttering and some ear, nose and throat defects of the children. Pavanamukta Asana is an enjoyable practice too.

Thus starting from simple movements and dynamic postures, they can be slowly led on to the static postures, the concept of Sthira and Sukha, thereby satisfied gradually. Demonstration is more effective than the explanation. (This holds good for all the Yogic Techniques). Postures are tailored as per the ability of the individual child.

PRANAYAMA: Pranayama controls and regulates breathing and is very beneficial for the autistic. This technique particularly improves the stamina, balance and strength, along with inducing better sleep by the improved circulation of the Vital Energy. Good breathing can also help release deeply held physical and emotional tension within the body. Pranayama helps in controlling fits which may be common among these children.

Sounds of animals make it interesting for them to perform. Kukkriya Pranayama, (dog panting breath) is an all time favorite with children. Mathangi Pranayama, Vyagraha Pranayama with Cheeri and Sharabha Kriya. Others like Kapalabhati is also very useful (for the slow dull students and not the hyperactive ones). The Shitali and Sitkari Pranayama are useful practices to help those with difficulty in speech.

Nada Pranayamas such as Pranava and Bhramari can help to normalise the brain function while Nadi Shuddhi can pacify the children and enhance the right-left brain coordination. Chandra Nadi Pranayama and Surya Nadi Pranayama can be used
depending on whether we need to work on activating/relaxing the children and also depending on which brain function needs to be improved. Right nostril works on left brain and left nostril on right brain. Mukha Bhastrika is also known as the 'cleansing breath' helps remove old, stagnant air from the lungs and cleanses the bloodstream of excess carbon dioxide. Its practice also decreases response time and enhances memory and comprehension. Research also suggests that it is useful in combating learning disorders, A.D.D., and mental retardation. (Bhavanani AB et al., 2003). It may also be of value to train mentally retarded children who have prolonged Reaction Time.

**SHATKARMAS**: Some of the Shatkarmas such as Trataka, Kapalabhati, may be very useful for the developing concentration and also act as tranquillizers. (The regular practices of Kunjal Kriya and Dugda Neti up to at least 40 days have been found to improve mental retardation (MP Pathak, & KL Bajpai, Kundalini Yoga Research Institute, Lucknow 1983). These children suffer numerous eye related problems and Trataka and the Neti are highly beneficial for such children along with a diet rich in Vitamin A and C. A recent study by Kamakya Kumar et al published in Yoga Mimansa (April 2010) has reported improved conduction velocity in the optic nerve with Jala Neti.

**MUDRAS**: Bhujangini Mudra and Brahma Mudra, working with breath and sound vibration induces a sense of relaxation and reinvigorates the head and neck region reducing stress, Hastha Mudras (Namaskar Mudra, Anjali Mudra, Gomuka Mudra) and Kaya Mudras (Yoga Mudra, Manduka Mudra) helps drive away depression, bringing out a sense of joy and happiness. It is better to avoid the Oli Mudras, due to their powerful influence on the gonadal and other endocrine glands.

**BANDHA**: Moola Bandha and Jalandhara Bandha are useful to relieve any emotional hang-ups and later the Uddiyana Bandha may be included. The Aswini Mudra and Moola Bandha have a deep effect on emotional and mental activity and hence useful in those who need balance of these aspects of their personality as it relives depression.

**DHYANA**: The practice of meditation in any form reduces the feeling of loneliness and gives peace of mind. It is definitely beneficial but may need to introduced in a gradual manner as it is usually a difficult practice for the autistic.

**YOGIC RELAXATION**: Unrealistic expectations at home and outside add powerful peer pressures on them driving them mad. Shava Asana with Kaya Kriya and Spanda-Nishpanda relaxes all aspects of the musculoskeletal system.
Prayer and chanting simple mantras makes them less aggressive, purifies the speech, calms the mind, and helps reduce distraction. Hence chanting the Pranava Mantra AUM can benefit these children. Helps maintaining their concentration and improves their alertness with rest and relaxation and aids them to get emotional and mental strength.

**BENEFITS OF THE YOGA PRACTICES**

It is important to learn to live Yoga and make it a way of life. Yoga helps them to coordinate the activities of mind, body and emotions, reduces the distracted state of mind thereby helping them to focus and concentrate, improves the activities of day today living to the degree which could never otherwise be achieved, improves one's ability and helps one to rely on their own selves making them independent, helps them develop their social relationships, reduces the frequency of violent emotional upsets, reduces the negative traits and tendency to cause injuries to self and others, develops a positive outlook improving self-confidence, self-sufficiency and sociability, Improves inter-personal relationships, improves their loco motor skills and psycho-motor coordination, reduces hyperactivity, improves appetite and sleep, improves overall health, increases immunity, reduces aggression, reduces dependency of drugs, increases the efficiency of the nervous system and thus helps in their rehabilitation.

**CONCLUSION**

There are millions of people who have some form of emotional, mental, or physical handicap that can limit their activities to varying degrees. Yoga is more about experiencing where you are now than about where you should be. Yoga for the autistic is not an alternative to any form of therapy. It is a way of life, a philosophy that applies as much to them as to any one else. Yoga and modern education must meet together to bring about a total transformation, to accelerate the process of evolution, to help in realizing self esteem, self-discipline, self-evolution and self-identity.

Although modern medical approaches are being used to cure autism, they have achieved only a small amount of success. In comparison to the treatment given to such children; yogic therapy has been found to be more beneficial, because the mode of action of many psychically active drugs is not fully clear. Mostly major and minor tranquillizers, antidepressants and anti-convulsants are given to these
children. It has been observed that many of these drugs have wide action and a considerable number of side effects, some bad and some very serious.

Yoga is an experiential science (Anubuthi Shastra). The physiological, bio-chemical and psychological benefits may be measured by the available series of tests. But is there any instrument that can measure the qualitative aspects of life? Give a specific value for the happiness, the contentment or the emotional stability that is gained by the Yogic Practices? The range may be given by the assessments made. These are variables that have to be felt and experienced; psychologically and soulfully. Research work is still in the toddler’s level as far as the disabled and the disabilities are concerned. But it can be authentically said that these practices make them joyful and happy, making them jubilant, improving their quality of life, giving them a sense of well being, apart from the other benefits. The sense of perception is tremendous in these children and it gives immense pleasure and satisfaction to be with them, to be a part of them- one amongst them. They teach us a lot - the harsh realities of what life is all about. They live their life as God has given it to them; accepting it gracefully-making no complaints about it. They are the Special Creations of the Divine’s unfathomable play.

Animals can be mysterious and unpredictable, but these nonhuman fellow beings seem to have a special rapport with autistic people. Dogs and cats seem to understand them better than normal humans. The empathy that these fellow beings can show their masters is remarkable, and the benefit is immense. These animals lack the sixth sense (or so it is said), but they have a remarkable capacity for patience, compassion, kindness, and understanding. Is it not necessary for all of us to rethink our own understanding of our relationship with the rest of the natural world?

REFERENCES


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