

YOGA FOR THE DIFFERENTLY-ABLED CHILDREN

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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.

WHAT IS DISABILITY?

Disability is any restriction or lack of ability (resulting from an impairment) to perform an activity in the manner or within the range considered normal for a human being. A **handicap** is a disadvantage for a given individual, resulting from impairment or a disability that prevents the fulfillment of a role that is considered normal (depending on age, sex and social and cultural factors) for that individual'. Disabled means "*differently abled*"; as they are popularly called. The World Health Organization (WHO) defines disability as: "*Disability is an umbrella term, covering impairments, activity limitations, and participation restrictions.*"

TYPES OF DISABILITIES

Types of disabilities include various physical and mental impairments that can hamper or reduce a person's ability to carry out his day to day activities. Disabilities can be broken down into a number of broad sub-categories, which include the following:

Physical Disabilities (which can be either in-born factor or acquired with age)

This category of disability includes people with varying types of physical disabilities including:

- Disability of the Upper limb(s)
- Disability of the Lower limb(s)
- Manual dexterity
- Visual Impairment
- Hearing Impairment

Developmental Disabilities (Cognitive or Learning Disabilities)

- Dyslexia,
- Speech/language

Mental Disabilities

- Alzheimer's Disease
- Anxiety Disorder
- Depression
- Phobia
- Schizophrenia

Intellectual disabilities

"Intellectual disability" or "developmental delay" is a term commonly used to describe someone with mental retardation, someone who learns and develops more slowly. But having an intellectual disability doesn't mean a person can't learn. World Health Organization (WHO) of the United Nations Organization (UNO), in International Classification of diseases and related problems (ICD - 10), published the definition of Mental Retardation in 1992 which states: *"Mental Retardation is a condition of arrested or incomplete development of the mind which is especially characterized by impairment of skills manifested during the developmental period which contributes to the overall intelligence, i.e., cognitive, language, motor and social abilities"*.

CHARACTERISTICS

- I.Q. level is below normal for the intellectually disabled
- Poor motor integration - clumsy and uncoordinated actions.
- Some exhibit physical features such as small head, very large head, fissured tongue, tiny slanting eyes(Down's Syndrome)
- Slow understanding and response, gets distracted very fast
- Accompanied with impairment in vision, speech or orthopedic conditions like club foot etc.

CLASSIFICATION

Based on the IQ, mentally challenged children are classified as

1.	Border line	--	71 - 89
2.	Mild	--	50 - 70
3.	Moderate	--	35 - 49
4.	Severe	--	20 - 34
5.	Profound	--	Below 20

CAUSES:

1. Biological Causes

a) Genetic Causes:

- Chromosomal abnormality (extra chromosome in 21st/23rd pair)

- Either of the parents retarded
- Parent as the carrier of the factor

b) Non Genetic Causes:

- Pre natal - Fever, malnutrition, high B.P., Diabetes, X ray. Asthma, Rh factor, and other drugs.
- Natal --
 - Born before 250 days (premature),
 - Gestation more than 10 lunar months
 - Long labor periods with difficulty
 - Delivered in wrong position
 - Wrong instruments used,
 - Bleeding in the brain of the child due to injury
 - Birth cry is delayed
- Post Natal --
 - High fever before the age of 6
 - Severe and partially treated T.B
 - Mal nutrition, Head injury etc.

2. Psychological Causes:

- Unfavorable environment
- Mal adjusted family
- Total isolation

Diagnosis and Treatment

The first step in diagnosing intellectual disability is a complete physical examination and medical history. Some forms are caused by treatable illnesses. If medical problems are ruled out, the child may then be given a series of intelligence tests, designed to determine the child's intelligence quotient. Some tests that are commonly used include the Stanford-Binet Intelligence Scale, the Wechsler Intelligence Scales, and the Kaufmann Assessment Battery for children. Final diagnosis may also include a series of interviews between a mental-health professional, the child, and the child's family.

No treatment can change a person's basic physical and intellectual capabilities. The goal of most treatment programs is to help the children to develop their

intellectual and functional skills to the maximum possible level. The federal government allows the children to have free testing and appropriate education and skills training from ages three to twenty-one. Many children thus have the opportunity to attend special preschool programs and day schools. These programs and schools teach children basic skills, such as bathing and feeding themselves. They also provide educational programs, extracurricular activities, and social events developed especially for the disabled children. As they approach adulthood, they may receive training in independent living and job skills. The level of training they receive depends on the degree of disability.

Treatment may also include family therapy. The purpose of family therapy is to help family members understand the nature of the disability. It also helps them develop skills for dealing with the special needs of the child. Parents may also receive counseling to help them deal with feelings of anger, disappointment or guilt.

PREVENTION:

- A broad community wide social education
- Maternal age is restricted to 18 - 36 years
- Avoidance of consanguineous marriages
- Avoidance of maternal use of intoxication and drugs.
- Proper immunization for pregnant mothers against infections
- Child should be immunized against diphtheria, whooping cough, tetanus, polio and T.B during the first year of birth.
- CSF examined
- Amniocentesis
- Proper nutrition
- Mental stress during first four months of pregnancy need to be avoided.

TRADITIONAL VIEWS ON DISABILITY

Information available from traditional sources:-

The Vedas, oldest text, 3000BC accepts persons with disabilities, as part of a natural order. The Garbopanishad, of the post Vedic Period, 1000BC; is a treatise on embryology, explains the systematic growth of the embryo in the 2nd chapter. Susruta, a rehabilitative surgeon; explains the development of the fetus in detail in the 3rd chapter of Sushruta Samhita (700 BC). The heart of

the fetus starts developing in the fourth month. As heart is the seat of consciousness, it expresses its desire for things of taste, smell etc. (through the longings of its mother). The enciente is called double-hearted (Dauhrida) now, those whose wishes and desires - not being honoured and gratified - lead to the birth of a paralysed, hump-backed, crooked-armed, lame, dwarfed, defect-eyed, and a blind child. Hence the desires of the enciente should be gratified, which would ensure the birth of a strong, vigorous and long-lived son. Suggestions about corrective surgery for certain disabilities have been explained. Gautama Buddha and Mahavira, self-actualized princes turned ascetics of the period 275BC preached the acceptance and not rejection, in the care and management of persons with disabilities. Chanakya the astute statesman, 400BC - legally banned the use of derogatory terms; when referring to persons with disabilities. Charaka, the traveling physician, 100 BC, classified persons with disabilities. He hypothesized that it was the result of defective genes, poor conditions during pregnancy, and faulty child rearing practices. In the Sangam period in Southern India, 200BC to 200AD- community-based services were well-established as a social responsibility of the royals to take proper care of the disabled. The Alvars 600-900AD, Meenakshi Pillai Thamizh 600 AD, the poet savants, sang hymns on the mother child care glorifying the child-rearing practices. With the advent of the Colonial rule, circa.1800 to 1947 the British rulers introduced institutionalization for persons with disabilities as a matter of administrative convenience. This practice however gradually weakened the prevailing indigenous systems which were based on community-based participation and rehabilitation of the disabled.

Yoga Sutras of Patanjali reveals that we have at our disposal an excellent Yogic system which advocates a method of controlling the mind and the body. He depicts a crystallized picture of what constitutes the mind, its functions and impediments. Patanjali has also described the states of mind- Mudha, Kshipta, Vikshipta, Ekagrata and Niruddha- the dull, distracted, partially distracted, one pointed and controlled respectively. The mind of the disabled is classified under the Mudha, Kshipta or Vikshipta states.

There are certain humane qualities that Maharishi Patanjali advises us to cultivate. These attitudes are: Maitri - Sukha (Friendliness towards those who are happy), Karuna - Dukha (Compassion towards those who are miserable), Mudhita - Punya (Cheerfulness towards the virtuous), Upekshanam - Apunya (Indifference towards the wicked). We need to have the friendliness and compassion towards the disabled.

Thirumoolar in Thirumandiram describes thus:

Paigindra vayuk kuraiyir kuralaagum

Paigindra vayu villaikkin mudamaagum
Paigindra vayu naduppadir koonagum
Paigindra vayuma tharkkillaip paarkkile (480)

Birth Imperfections Explained as

When after intercourse, the man is short of breath,

The infant born a dwarf will be;

When breath blows feeble,

The issue may be defective limbs be born;

When breath halts in mid-act

A hunch-back will be born;

All these apply not to woman's rhythm.

Maadha udharam malamigil mandanaam

Maadha udharam jalamigil moongaiyaam

Maadha udharam irandokkil kannillai

Maadha udharatthil vanda kuzhavikke (481)

How Deaf, Dumb, and Blind are Born:

When at the time of union,

The mother's bowels are heavy exceeding,

A dullard will be born;

If urine exceeds,

A dumb will be born;

If both exceed, a blind will be born;

Thus is it for the infant born

The mother's condition according.

The great Dravidian Sage **Thiruvalluvar** has said *Poriinmai yaarkkum pazhiandru arivuarindu Aalvinai inmai pazhi. (618)*

The disability (physical or mental) is no disgrace to any one. But to be without knowing what should be known and to be effortless is indeed disgraceful

YOGA FOR THE DISABLED

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. Disability affects their mental attitude. They lack confidence and have a poor self-image. They develop feelings of inferiority from their awareness of their own abnormality and lack of success in all directions. They are frustrated due to the inability to do simple things, either not at all or with immense difficulty. Hence they are always highly tense and tire easily from physical exertion. The spine is stiff, thus producing much pain, which further 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 various disabilities. 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: Although the '*differently abled*' children might not be able to practice all of the poses, there are many postures that are especially beneficial to them. Even trying to attain a particular posture has the same benefit as attaining the final position. *Depending upon the type of handicap, most of these postures can be modified for them.* In fact, they can be taught to perform various poses without moving at all. There are instances of severely disabled persons who practice their yoga routine from their beds or wheelchairs. 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 Padahasthasana, Trikonasana, Padangushtasana helps increasing blood flow to the head region and may help activating the brain cells.

Postures to increase concentration: Balancing postures such as Vrikshasana, Ardhashakrasana and Natarajasana. 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.

Those affected by the impairment of the lower limbs can be taught the practice of hand balancing postures. These children are especially good with these postures.

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 disabled. 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. Kukkuriya 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 people and not the hyperactive ones). The Shitali and Sitkari Pranayama are useful for the people affected by the Down's syndrome as they have thickened tongue with difficulty in speech.

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.

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, Hasta Mudras and Kaya Mudras(Yoga Mudra, Manduka

Mudra) helps drive away depression, bringing out a sense of joy and happiness. Avoid Oli Mudras, due to their powerful influence on the gonadal and other endocrine glands.

BANDHA: Jalandhara Bandha. Later Uddiyana Bandha may be included.

DHYANA: The practice of **meditation** in any form reduces the feeling of loneliness and gives peace of mind. It is very beneficial for the physically disabled, but a difficult practice for the mentally challenged.

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 obesity, controls dribbling, helps in disappearance of facial tics, 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.

RESEARCH ACTIVITIES

A study done by Telles S, Naveen KV, at the Vivekananda Kendra Yoga Research Foundation, Bangalore showed that the use of yoga for rehabilitation has diverse applications. Yoga practice benefited mentally handicapped subjects by improving their mental ability, also the motor co-ordination and social skills. Physically handicapped subjects had a restoration of some degree of functional ability after practicing yoga. Visually impaired children showed a significant decrease in their abnormal anxiety levels when they practiced yoga for three weeks, while a program of physical activity had no such effect.

A study reported in the Journal of Mental Deficiency has suggested that "The practice of yoga can be useful for children, when applied to a group of ninety mentally retarded children, yoga helped produce a highly significant improvement in IQ and social adaptation."

A one-year controlled study was conducted by Uma K et al at the Vivekananda Kendra Yoga Research Foundation, Bangalore where ninety children with mental retardation of mild, moderate and severe degree were selected from four special schools in Bangalore. Forty-five children underwent yogic training for one academic year (5 h in every week) with an integrated set of yogic practices, including breathing exercises and Pranayama, Sithilikarana Vyayama (loosening exercises), Suryanamaskar, Yogasanas and meditation. They were compared before and after yogic training with a control group of 45 mentally retarded children matched for chronological age, sex, IQ, socio-economic status and socio environmental background who were not exposed to yoga training but continued their usual school routine during that period. There was highly significant improvement in the IQ and social adaptation parameters in the Yoga group as compared to the control group. This study shows the efficacy of yoga as an effective therapeutic tool in the management of mentally retarded children.

It is known that regular practice of yoga builds up the personality at all levels, i.e. physical, mental, intellectual and emotional, in normal persons (Udupa & Singh, 1972; Udupa et al., 1973). The results from this study clearly show that children with mental retardation also improve considerably by yogic practices

It has been found especially useful in improving the intellectual performance and social adaptation in all three categories of retardation under study, more so in the moderate and mild groups. (Gupta & Sethi, 1980)

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 handicapped is not an alternative to any form of therapy. It is a way of life, a philosophy that applies as much to the disabled 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 the disabled, 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, biochemical 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 mentally or physically disabled people. Dogs and cats are seen and heard to perform simple tasks for paraplegic and quadriplegic individuals, providing them the ability to live much more independently. 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?

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