



Yoga Vijnana

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Yoga Vijnana

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From the Editor's Desk.....

Man is a complex of intellect, will and emotions; he is a being who thinks, wills and feels. Intellect has given rise to the philosophy of Knowledge; will to the philosophy of Action; and emotion to the philosophy of Devotion. These philosophies respectively gave birth to Jnana-yoga, Karma-yoga and Bhakti-yoga and it's evident that they are as old as these philosophies. Different people attain the goal of liberation by these three different paths of knowledge, action and devotion. All these three ultimately stand synthesized. This synthesis is 'Yoga'. Jnana is the most important thing, being the very essence of reality. Karma and Bhakti, understood in their proper senses, are only manifestations of Jnana. Therefore, Yoga sadhana of an individual shall be the integrated practice of Jnana-yoga, Bhakti-yoga and Karma-yoga. This is the real foundation for all kinds of yoga and their principles shall be incorporated while practicing Yogic practices like Asana, Pranayama and Dhyana etc. The practice of Jnana-yoga requires certain qualifications. They are Vivek (discriminating knowledge), Vairagya (renunciation), Shat-sampatti (abundance of six virtues) and Mumukshatva (strong desire for liberation). These four Sadhanas are the necessary qualifications of a disciple and are included in the first two stages of Astanga-yoga of Maharshi Patanjali. The Asanas and Pranayama come at the right time and remove any disturbing factors arising from the body and imbalance of prana. They prepare the ground for the higher Sadhanas like, Dharana, Dhyana and Samadhi. The point is one has to follow the right path of Yoga Sadhana to get good results. Which is lacking nowadays. This is one factor that we have to emphasize while giving Yoga training to teachers. The system of Yoga in my opinion shall be strengthened only by bringing in well trained, competent and devoted Yoga professionals, which is the need of the hour.

Keeping in view of the above said goal, efforts are being made by several leading Yoga institutions including Morarji Desai National Institute of Yoga (MDNIY), to strengthen the system by developing good Yoga courses and curriculums which are the essential factors in producing the competent Yoga professionals. MDNIY is also coordinating with leading Yoga institutions and eminent Yoga professionals in bringing uniformity in the syllabi and curriculums of different Yoga courses.

The first issue of the journal is in your hands. Several eminent scholars have supported us by giving their valuable suggestions and contributing their articles. The articles of Dr. Pranav Pandya, Dr. Anant Bharati, Dr. Ananda Balayogi Bhavanani, Dr. S.K. Ganguly, Smt. Hansaji Yogendra, Dr. Bhoosnurmath and Dr. Purvi Upadhyay, Dr. I. V. Basavaraddi are published in this issue. I hope, these articles will throw a light on various aspects of Yoga and enhance the knowledge among the scientists, researchers and Yoga practitioners. I also hope that the student community will make use of articles published in this journal to develop their personality.

The Institute has got huge response from all corners of the country, appreciating our efforts to publish the quarterly journal Yoga Vijnana. This has increased our responsibility. I assure timely publication of the journal in the days to come. The comments and suggestions of readers are most welcome to make this publication more meaningful.

*Sarve bhavantu sukshinah, Sarve santu niramayah
Sarve bhadrani pashyantu, Maa Kaschit dukha bhagbhavet*

Om Shantih Shantih Shantih

DR. ISHWAR V. BASAVARADDI

Editor

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YOGA NIDRA & ITS IMPACT ON HUMAN PHYSIOLOGY

Dr. Pranav Pandya (MD)*
Kamakhya Kumar**

Abstract

The present study aims at finding out the effect of Yoga nidra on few physiological variables on students of higher education. The study was conducted at the Yoga Clinic of Dev Sanskriti Vishwavidyalaya. Practice time was 30 minutes the duration was 6 months. 80 students were taken from P.G. Yoga classes for observing the effect as well as 30 were in control group. The result shows a significant change on the pulse rate, respiration rate, blood pressure, and GSR (Galvanic skin resistance).

Introduction

Yoga Nidra is one such wonderful technique, not only for physical or mental relaxation but also for preparing the mind for yogic discipline. It concerns mainly with Pratyahara (the fifth state of Astanga Yoga) and Dharana (concentration).

It is to be understood that ordinary sleep is not relaxation, for tensions cannot always be resolved completely in ordinary sleep. Yoga Nidra is qualitatively different type of relaxation. It is sort of 'sleep' where all the burdens are thrown off to attain more blissful state of awareness, a relaxation much more intense than ordinary sleep.

To understand Yoga Nidra it will be relevant to discuss few related aspects like different stages of consciousness, sleep, dream and Samadhi and their relation with Yoga Nidra.

Colin Wilsons suggests eight degrees of consciousness, from Level 0 to 7. They are: Level 0-deep sleep; Level 1.dreaming or hypnagogic; Level 2-mere awareness or unresponsive waking state; Level 3-self awareness that is dull and meaningless; Level 4-passive and reactive, normal consciousness that regards life 'as a grim battle'; Level 5-an active, spontaneous, happy consciousness in which life is exciting and interesting; Level 6-a transcendent level where time ceases to exist. Wilson does take note of further levels of consciousness as experienced by mystics but gives no details.

Yoga Nidra according to Swami Rama (1998) is a state between sleep and Samadhi. It is a half- sleep and half waking state: it is not a waking state, and it is not really a sleep state. Yoga Nidra is a state of conscious sleep in which one can record what is going on. There is a fine demarcation between Yoga Nidra and Samadhi. In Yoga Nidra, one can record those states of being which he cannot receive in the conscious state.

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When one cannot register something properly in the waking state, they can go into Yoga Nidra to register it. Yoga Nidra is used to develop wisdom which cannot be developed otherwise. Practice of Yoga Nidra is divided into three phases: In the first phase lying down in shavasana and doing sixty-one point exercise. In the second phase, doing shithilikaran and in the last phase, having breathe awareness with the visualization of different chakras (the different psychic centers of subtle body).

According to Sri Ram Sharma Acharya (1995): Yoga Nidra can be understood as scientific sleep. It is a total practice of yoga itself. The practice of Shithilasana, Savasana, Sunyavastha and Samadhi are of great importance in conditioning the body and mind. They the different stages of Yoga Nidra.

In usual sleep, one does not have any control over his dreams. Auto-suggestion is impossible in this case. The practice of Yoga Nidra on the contrary, allows one to attain a state of 'awakened' sleep. In this state, the body and the mind (thought process) are made to sleep as per the order of the inner will. The determination, the will power of the individual self remain active in this state and endeavor the auto-suggestive experience of the power of the unconscious mind and its linkage with the soul.

Sw. Satyananda Saraswati (1975) explains Yoga Nidra as a state of mind between wakefulness and dream. When someone practices Yoga Nidra, he opens the deeper phases of the mind. During the practice of Yoga Nidra the consciousness is at different levels. Sometimes it is very close to the senses and at others, it is at a very remote distance.

When the consciousness is at a remote distance. It is only possible to understand through the auditory channels. During Yoga Nidra the consciousness is suspended for a few moments periodically, which means that it alternates between the subconscious and unconscious state.

For the practice of Yoga Nidra, one should lie flat on his back and follow the spoken instruction of yoga instructor. It is convenient to use Yoga Nidra tape. During practice there should be no movement by the practitioner, besides he should try to remain awake and aware of every given instruction.

In Yoga Nidra, it is not necessary to concentrate. One should just keep the mind moving from point to point and be aware of every experience. Yoga Nidra means sleep with a trace of awareness.

1. Review of Related Research Studies :

Various studies have been done in different parts of the world for observing the effect of Yoga Nidra. In this regard the following studies can be referred to :

Sannyasi Mangalteertham (1998) concluded on the basis of his study that the practice of Yoga Nidra brings alpha dominance in the brain, which is characterized by mental relaxation.

Siddhartha Bhushan (2001) says on the basis of his study that the technique of Yoga Nidra has preventive, promotive and curative value. It prevents stress and stress-related disorders by inducing deep physical, emotional and mental relaxation, by training the mind to remain calm and quiet and by rooting out the

repressed desires and thoughts from the deeper realms of the mind. As a promotive science, Yoga Nidra awakens the inherent creativity and promotes the learning and memory abilities of the practitioner. Researches also indicate that Yoga Nidra can be used as a therapeutic technique to cure psychological disorders like Anxiety, Insomnia, etc. and Psychosomatic Diseases like Asthma, Coronary Heart Disease, Cancer, Hypertension, etc. In our present modern lifestyle, where psychological and psychosomatic problems are on the rise, the technique of Yoga Nidra may serve as a real boon for mankind.

Mandlik Yogacharya Vishwas, Jain Premchand, Jain Kiran, M.S in their study EFFECT OF Yoga Nidra ON EEG (Electro - Encephalo - Graph) found that there (2002) psi was missing in the preliminary test session. It was felt that this was due to students' doing too many preliminary tests, since and they were too confused by the time the experimental test had occurred. In subsequent year the students did less preliminary testing, and the class was less rushed and they were at ease with the procedure. This resulted in overall improved score. The relaxation session gave a consistent score over both the years. The score of meditation session as compared with the score from the previous year improved favourably as does Yoga Nidra. This suggests that the lessons learnt from the first year are resulting more conducive for psi testing. It is therefore appropriate to move from the preliminary exploratory stage to one with proper controls and predetermined statistical analysis.

Veena Verma (2004) in her study, 'Possibilities of Revolutionizing the Education System through Yoga Nidra' states that Yoga Nidra has a positive effect in enhancing the memory of children.

Kumar Kamakhya (2004) in his study on Yoga Nidra and its impact on Students' well being, observed a significant change on the stress, anxiety and general well being level of the college going students.

The above study shows that researchers are keen to know the effect of Yoga Nidra in various directions; thus it is the right time to go deep into the search of the impact of Yoga Nidra having the following aims and objectives:

2. Objective:

1. To assess the effect of Yoga Nidra on Pulse rate level of the subjects.
2. To assess the effect of Yoga Nidra on Respiration rate level of the subjects.
3. To assess the effect of Yoga Nidra on Blood pressure level of the subjects.
4. To assess the effect of Yoga Nidra on GSR (Galvanic skin resistance) level of the subjects.

3. Methodology

(i) Design & Sample

To observe the effect of Yoga Nidra, 80 students (40 males, 40 females) of age 20-30 years from Dev Sanskriti Vishwavidyalaya of P.G. yoga classes were selected for the practice of Yoga Nidra assigned to

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the experimental group. One of the groups of 30 students (15 Males, 15 Females) of same age group and same class also considered as control group.

Both the group experimental and control group were given practice in Asanas, Pranayamas and Shatkarmas regularly (except Sunday and holidays). Experimental group practice in Yoga Nidra for half an hour daily (except Sunday and holidays) additionally. Before starting the practice of Yoga Nidra both the groups under went a few psychological tests.

Practice of Yoga Nidra in this study is the simplest method of relaxation which is being practiced in the flat lying position of shavasana and under the spoken instruction of Yoga-instructor. The practice includes the resolve, body part awareness, breath awareness & visualization.

(ii) Tools

To assess the impact of Yoga Nidra the following parameters were used: Pulse rate, Respiration rate, Blood pressure and Fatigue. To observe the pulse rate, respiration rate and GSR, the biofeedback machines have been used, as well as to measure the blood pressure Sphygmomanometer has been used in this study.

After the six months duration the same test was administered and the results at 0.01 significant levels are shown as under :

4. Results

(i) Results Related to Hypothesis - 1

Table - 1

(Pulse Rate - Male)

	Mean	SD	"t" value	significant level
Experimental	66.87	8.80	3.40	at 0.01
Control	71.53	6.17		

Table - 1 shows that the post mean values of experimental group are 66.87 and 71.53 of control group and the 't' value is 3.40, a significant change at 0.01 significant level in the pulse rate of the male subject of experimental and control group; Hypothesis (1) has been proved.

(i) Results Related to Hypothesis - 2

Table - 2

(Pulse Rate - Female)

	Mean	SD	"t" value	significant level
Experimental	72.62	5.10	5.20	at 0.01
Control	78.13	4.61		

Table -2 shows that the post mean values of experimental group are 72.62 and 78.13 of control group and the 't' value is 5.20, a significant change at 0.01 significant levels in the pulse rate of the female subject of experimental and control group; Hypothesis (2) has been proved.

(iii) Results Related to Hypothesis - 3

Table - 3

(Respiratory Rate - Male)

	Mean	SD	"t" value	significant level
Experimental	14.23	3.75	6.01	at 0.01
Control	17.60	1.35		

Table - 3 shows the post mean values are 14.23 of experimental and 17.60 of control group and the 't' value is 6.01, a significant change at 0.01 significant levels in the respiration rate of the male subject of experimental and control group; Hypothesis (3) has been proved.

(iv) Results Related to Hypothesis - 4

Table - 4

(Respiratory Rate - Female)

	Mean	SD	"t" value	significant level
Experimental	13.82	2.60	4.6	at 0.01
Control	16.00	2.65		

Table - 4 shows the post mean values are 13.82 of experimental and 16.00 of control group and the 't' value is 4.6, a significant change at 0.01 significant levels in the respiration rate of the female subject of experimental and control group; Hypothesis (4) has been proved.

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(v) Results Related to Hypothesis - 5

Table - 5

(B. P. Systolic - Male)

	Mean	SD	"t" value	significant level
Experimental	111.65	8.82	3.55	at 0.01
Control	117.33	7.99		

Table -5 shows the post mean values are 111.65 of experimental and 117.33 of control group and the 't' value is 3.55, a significant change at 0.01 significant level in the systolic blood pressure of the male subject of experimental and control group; Hypothesis (5) has been proved.

(vi) Results Related to Hypothesis - 6

Table - 6

(B. P. Systolic -Female)

	Mean	SD	"t" value	significant level
Experimental	109.40	3.44	2.86	at 0.01
Control	116.00	9.77		

Table - 6 shows the post mean values are 109.40 of experimental and 116.00 of control group and the 't' value is 2.86, a significant change at 0.01 significant level in the systolic blood pressure of the female subject of experimental and control group; Hypothesis (6) has been proved.

(vii) Results Related to Hypothesis - 7

Table - 7

(B. P. Diastolic - Male)

	Mean	SD	"t" value	significant level
Experimental	75.40	5.68	3.53	at 0.01
Control	78.93	4.20		

Table - 7 shows the post mean values are 75.40 of experimental and 78.93 of control group and the 't' value is 3.55, a significant change at 0.01 significant level in the diastolic blood pressure of the male subject of experimental and control group; Hypothesis (7) has been proved.

(viii) Results Related to Hypothesis - 8

Table - 8

(B. P. Diastolic - Female)

	Mean	SD	"t" value	significant level
Experimental	72.30	3.13	3.15	at 0.01
Control	76.67	6.17		

Table -8 shows the post mean values are 72.30 of experimental and 76.67 of control group and the 't' value is 3.15, a significant change at 0.01 significant level in the diastolic blood pressure of the female subject of experimental and control group; Hypothesis (8) has been proved.

(ix) Results Related to Hypothesis - 9

Table - 9

(GSR - Male)

	Mean	SD	"t" value	significant level
Experimental	187.68	161.69	4.58	at 0.01
Control	85.53	42.04		

Table -9 shows that the post mean values of experimental group are 187.68 and 85.53 of control group and the 't' value is 4.58, a significant change at 0.01 significant level in the GSR of the male subject of experimental and control group; Hypothesis (9) has been proved.

(x) Results Related to Hypothesis - 10

Table - 10

(GSR - Female)

	Mean	SD	"t" value	significant level
Experimental	485.53	868.50	3.44	at 0.01
Control	178.43	136.95		

Table -10 shows that the post mean values of experimental group are 485.53 and 178.43 of control group and the 't' value is 3.44, a significant change at 0.01 significant level in the GSR of the female subject of experimental and control group; Hypothesis (10) has been proved.

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Discussion & Conclusion

Through the body mind relationship, relaxed body gives relaxation to the entire nervous system. Through the relaxation of central nervous system in Yoga Nidra, relaxation in autonomic nervous system takes place, as it reduces the whole physical and mental activities. Reduction in the muscular and neural activities slows down the metabolic rate of the body. During the practice of Yoga Nidra, due to the relaxed body and mind muscles become relaxed, arteries of the body become dilated as vasodilatation occurs. Hence the cardiac output as well as cardiac work load reduces; the systolic and diastolic blood pressure with pulse rate comes down which has been seen during the present study. Due to the practice of Yoga Nidra relaxed body requires less oxygen accordingly less metabolic activities. Need of the oxygen in the body becomes less; due to that, reduction in the respiration rate has been observed.

As we know GSR is a change in the electrical properties of the skin in response to stress or anxiety; can be measured either by recording the electrical resistance of the skin or by recording weak currents generated by the body. It can also be understood as a drop in the electrical resistance of the skin, widely used as an index of autonomic reaction. Jennifer Macey (2005) has made a direct connection between the nervous and immune system. He reported that stress leads to a build up of a hormone that inhibits the body's ability to fight off bacteria and viruses. Since practice of Yoga Nidra is able to reduce the stress and anxiety of the practitioner, because of its total relaxation effect on the physical mental state it improves the GSR of the subjects.

Yoga Nidra can be considered as a highly effective practice for reducing Pulse rate, Respiration rate and Blood pressure on the basis of the present study. Practice of Yoga Nidra increases the Galvanic Skin Resistance of both male and female subjects. On the basis of this study it can also be said that practice of Yoga Nidra improves the immune system also.

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YOGA AND STRESS

Yogacharya Dr ANANDA BALAYOGI BHAVANANI*

Introduction

Modern man faces stress everywhere and caught in its claws in a vicious spiral, not knowing how to extricate himself. His life has become a 'rat-race' and his body, emotions and mind are all jangled by the physiological and psychological responses of his 'self' to the stress he faces in his life at every stage of existence. None is spared of the pull of this web. From tiny tots facing innumerable 'tests', in school, corporate businessmen struggling to balance their accounts at work, farmers toiling for their daily bread, soldiers guarding the frontiers, news-reporters breaking themselves in order to make their 'dead-line' - no one knows how to escape the stress.

The words tension, pressure and stress are synonymous terms that are used to describe the huge expenditure of nerve energy that modern conditions or situations of life demand from all of us. This can easily be seen when a busy doctor, lawyer, businessman or politician has to meet a large number of persons, face problems and find out immediate solutions. In such situations human body is made to operate without a break, with the result that our nervous system is perpetually under high tension and our muscular system becomes habitually tense. All of this then ultimately leads to mental, emotional and physical fatigue. One of the most common statements heard nowadays is "I am too tired to even think!"

The ability to withstand stress differs from one individual to another. Every individual has a limit up to which, he can bear stress and cope with the demands of his external environment. Type of personality, individual temperament and emotional stability determine this ability to cope with stress. When external stress exceeds this limit, then they succumb to overstress. In such a scenario, the body and mind of that person try to reduce, avoid or withdraw from that stress-creating situation. However, if the excessive stress persists and / or increases, the body and mind suffer. This leads to physical maladies and mental pathologies. Insomnia, Asthma, Coronary troubles, Hypertension, Cancer, Sexual Inadequacies, Diabetes, Mental Breakdown, Neurotic Behaviour are only a few of the numerous disorders that result from excessive stress.

Caught in this situation, people try to seek release from such overstress by resorting to handy remedies such as sleeping pills, alcohol, smoking, absenteeism, and emotional withdrawal. None of these are answers to the problem. On the contrary they start to create more stress and problems for such a person.

Recent research has supported the role of stress or rather 'distress' in premature aging and the etiology of disease. It is postulated that frequent stressful experiences lead to the failure of the homeostatic, self-

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regulating mechanisms of the organism leading to disease, premature aging and early or sudden death. Stress has also been shown to weaken the immune system and make us more vulnerable to infection and other such health related problems.

We must realise that it is our attitude to things that creates stress and causes a major part of the problem. Relaxation and exercise can form part of stress management but rarely are they the whole answer as they do not deal with what causes us to become tense in the first place. We need to find out where the problem lies-whether in our attitude or behaviour or a combination of both. We should also develop the skills to overcome it. For example, if you always give in to others you will end up feeling like a doormat. If you practice relaxation you may end up as a relaxed doormat rather than a tense one but everybody will continue to walk over you. And now as you are not showing signs of stress or tension, they will walk over you with an easier conscience. Thus we must learn to analyze what is causing the stress and develop the necessary skills to combat it. Great motivation, commitment and practice are required to do this to the level necessary.

Yoga is a spiritual science for the integrated and holistic development of our physical, mental as well as moral-spiritual aspects. The philosophy of Yoga is practical and definitely applicable in our day-to-day living. Yoga has been documented to produce desirable physiological changes. Recent advances in the field of research have shown that it also has sound scientific basis. The Yogic concept of health and disease enables us to understand that the cause of physical disorders stems from the seed in the mind and beyond. **Adi** is the cause and **Vyadhi** only the effect in the Yogic scheme of things. By paying careful attention to personal history, one can nearly always trace the origins of psychosomatic disease back to patterns of emotional pressures.

From the Yogic viewpoint of disease it can be seen that psychosomatic diseases appear to progress through four distinct phases:

1. **Psychic Phase:** This phase is marked by mild but persistent psychological and behavioral symptoms of stress, such as irritability, disturbed sleep and other minor symptoms.
2. **Psychosomatic Phase:** If the stress continues there is an increase in symptoms, along with the beginning of generalized physiological symptoms such as occasional hypertension and tremors.
3. **Somatic Phase:** This phase is marked by increased function of the organs, particularly the target, or involved organ. At this stage one begins to identify the beginnings of a disease state.
4. **Organic Phase:** This phase is marked by the full involvement of a so-called disease state, with physiological changes such as an ulcerated stomach or chronic hypertension, becoming manifest in their totality.

Often, however, the early stages of the disease process are overlooked and the final stage is seen as an entity unto itself, having little relationship to one's living habits and patterns. This is because modern

medicine only looks at the human being as being the physical being and neglects the effects of the Pancha Kosha and Tri Sharira on health and disease.

There are many examples of psychosomatic diseases, which are directly related to stress. They include Common Colds, Ulcers, Headaches, Back Pains, Chest Pains, Spastic Colons, Constipation and Diarrhoea. The list is almost endless. We don't know why one organ system is affected by stress and not another. Certainly, genetic factors, diet and conditioned learning are all involved, but the key lies in one's mental structures. In other words, what is increasingly clear is that stress is at the root of all psychosomatic diseases regardless of the organ system involved.

The art and science of Yoga has infinite possibilities for providing answers to many problems of modern man. However, modern man misunderstands this science of Yoga and wants it to be his miracle pill. A pill that he takes only once, and wants all his problems to vanish into thin air! Yoga is a holistic science and must be learnt and practised with such a view in mind. The dedicated practice of Yoga as a way of life is no doubt a panacea for problems related to stress and stress-induced disorders.

We must, however, remember that Yoga is not just performing some contortionist poses or huffing and puffing some Pranayama or sleeping our way through any so-called meditation. It is an integrated way of life in which awareness and consciousness play a great part in guiding our spiritual evolution through life in the social system itself and not in some remote cave in the mountains or hut in the forest. This is why Pujya Swamiji Gitananda Giri Guru Maharaj has stated "Yoga is the science and art of right-useness (righteousness) of body, emotions and mind.

WHAT IS STRESS?

Stress may be defined as the "Response Pattern of an Organism to Prepare Itself for Fight or Flight".

The fight or flight response relieves the effects of stress and thus is a normal phenomenon termed 'eustress'. However, modern man has no means to 'fight or flight' the real or imagined stress and ends up in "distress" which then leads to psycho-somatic disorders of various kinds.

To quote an example from Pujya Swamiji Gitananda Giri . "If you were face to face with a saber-toothed tiger in prehistoric times you either fought it, fled the scene, or ended up in its tummy!" This led to the relief of the stress. Now a days we have the same 'stress response' but are not facing only 'saber-toothed' tigers and have no where to run, no means to fight and thus no mechanism to relieve the stress.

This leads to 'distress' which causes imbalance of the system and thus we never experience the Yogic principle of 'Samatvam' (equal mindedness in all situations) and 'Sthita Prajna' (the person who has developed Samatvam).

In the words of the eminent Indian scientist Dr. W. Selvamurthy, **"Stress is an Altered State of Body and Mind from Normal Homeostatic Conditions that is Caused due to Extrinsic or Intrinsic Factors.**

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This disturbance is due to unusual burden on the organism leading to a state of tension and pressure which threatens to damage and impair the capacity of the organism. He also emphasised the point that all stress is not bad. Stress has both a positive as well as the negative dimension. The positive dimension of stress brings out creativity and the best in us by goal setting and improved performance via the optimal arousal of body and mind. On the other hand, the negative dimension of stress through exaggerated arousal of the body and mind leads to, decreased performance and ill health. It is like a parabola curve, which initially leads to betterment of performance but later when more and more stress occurs, performance suffers drastically. (see fig.)

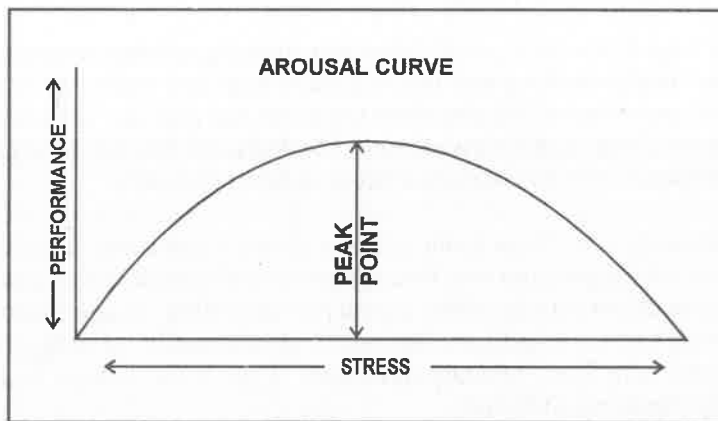


FIG : SOURCES OF STRESS

We are affected by stress from all directions. It may be from the work place, the home, family members or from within the person themselves. The sources of stress can be classified as those due to the external environment and those due to the internal environment of the person themselves.

EXTERNAL ENVIRONMENT

1. Physical environment
 - a. Climatic changes.
 - b. Natural disasters.
 - c. Man-made disasters .
2. Family environment
 - a. Stress at home: cruel husband, nagging wives, ill-behaved children.
3. Work environment
 - a. Stressful job situations such as defense personnel, anesthesiologists.
 - b. Exploitation.
 - c. Laziness and underachievement..
4. Societal environment

- a. Fast life & over-activity.
 - a. Negative social behaviour & wrong actions.
 - b. Disharmony in the society.
5. Conflict between intellect & emotions.
- a. Lack of harmony between thought, word and deed.
6. Sudden / severe / cumulative changes.

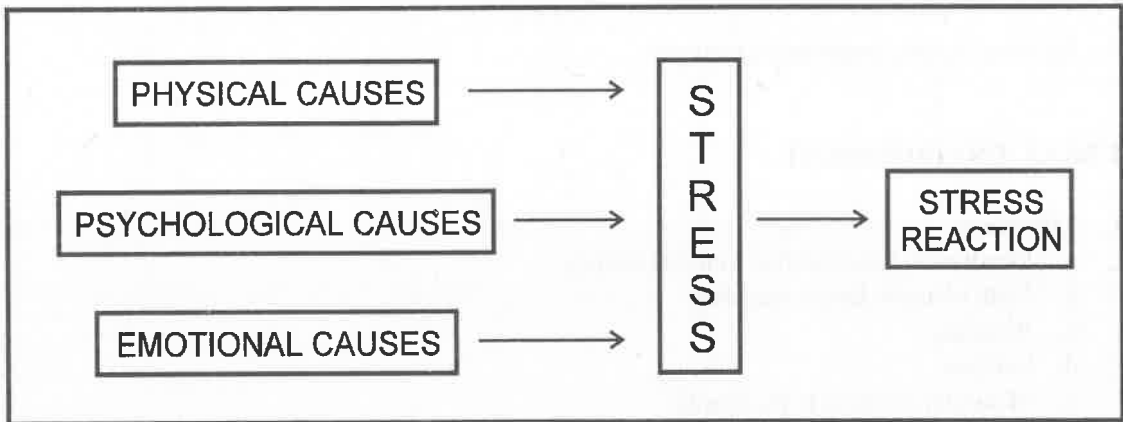
INTERNAL ENVIRONMENT

1. Life events
 - a. Death of a close friend or family member.
 - b. Birth of a new family member.
 - c. Wedding.
 - d. Divorce.
 - e. Misunderstanding in the family.
2. Loss of an expected promotion
3. Biological factors
 - a. Capacity of the system to withstand and combat stress.
 - b. Stress threshold of the person.
 - c. Type of personality.
4. Psychological factors
 - a. Unbalanced outer development. No parallel inner development.
 - b. Overindulgence & immorality.
 - c. Negative emotions such as anger, hate, jealousy, ego, grief, self-doubt.
 - d. Over-ambition, inflated goals & greed.
 - e. Too much desire, excessive attachment.
5. Physiological states
 - a. Pregnancy.
 - b. Post partum.
 - c. Puberty.
6. Pathological states
 - a. Disorders and diseases that decrease the ability to combat stress.

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7. Pharmacological factors
 - a. Some drugs decrease the ability to combat stress
8. Becoming a millionaire overnight

FIG : STRESS RESPONSE



Prof Hans Selye's model of stress reaction in the body, known as the General Adaptation Syndrome (GAS) has three phases :

- 1) Alarm Reaction,
- 2) Resistance,
- 3) Exhaustion.

- **ALARM REACTION:** This is the immediate effect of stress on the body. In this the person responds to the perceived or real stress with either 'fight or flight'. Stress hormones such as adrenaline, nor adrenaline, cortisol, glucagon and aldosterone are secreted and various physiological changes occur in the body to prepare us to respond to the stress.
- **RESISTANCE:** In this phase the body seems to return to normal but if the stress persists, the resources of the body get depleted. Externally the problem is not visible and we end up thinking that all is well with our system.
- **EXHAUSTION:** Chronic stress places a constant load on these Neuro-endocrine adaptive mechanisms leading to distortion in the homeostatic mechanism, thus weakening the response of the organism to environmental challenges which in turn leads to ill health and disease. The disorders that we associate with stress start to manifest in this phase.

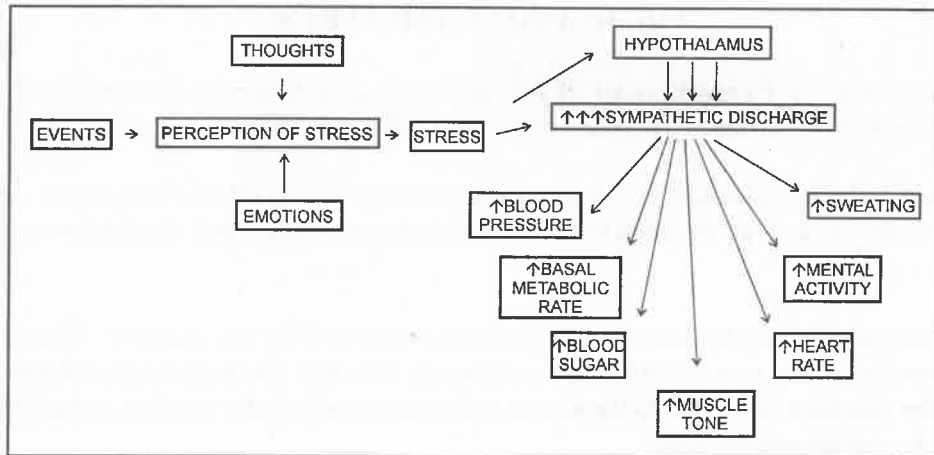


FIG : RESPONSES TO STRESS

PHYSIOLOGICAL RESPONSES TO STRESS

1. Increased pulse rate.
2. Increased blood pressure.
3. Increased respiratory rate.
4. Increased oxygen consumption.
5. Increased metabolism.
6. Increased muscle activity.
7. Increase apocrine type of sweating over nose and palms.
8. Heightened excitability of all senses.
9. Decreased flow of blood to abdominal region.

PSYCHOLOGICAL- RESPONSES TO STRESS

1. Decreased concentration.
2. Negative emotions (fear or anxiety).
3. Decreased cohesive thinking.
4. Decreased and disturbed sleep.
5. Decreased appetite.
6. Decreased sense of 'well being'.
7. Snapping and shouting at others.

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THE KLESHAS AND STRESS

According to Maharishi Patanjali, most of our problems stem from the five psycho-physiological afflictions (*Pancha Klesha*) that are inborn in each and every human being.

These Pancha Klesha are ignorance (*Avidya*), egoism (*Asmita*) and our sense of needing to survive at any cost (*Abhinivesha*) as well as the attraction (*Raga*) to external objects and the repulsion (*Dweshha*) to them.

Ignorance (*Avidya*) is usually the start of most problems along with the ego (*Asmita*). Then, our sense of needing to survive at any cost (*Abinivesha*) compounds it further. Both attraction (*Raga*) to external objects and the repulsion (*Dweshha*) to them need to be destroyed in order to attain tranquility as well as equanimity of emotions and the mind.

Maharishi Patanjali further states that the practice of Kriya Yoga (*Yoga of mental purification*) consisting of Tapas (*disciplined effort*), Swadhyaya (*self analysis*) and Ishwara Pranidhana (*surrender to the Divine will*) is the means to destroy these five mental afflictions and attain to the state of Samadhi or oneness with the Supreme Self or the Divine.

BHAGAVAD GITA VIEW ON 'STRESS'

Many thousands of years ago, Yogeshwar Krishna taught us about the effect of stress on man and how through our attraction to worldly sensory objects we cause our own destruction. The description of the 'Path to Destruction' as mentioned in the Bhagavad Gita holds true to this modern age also.

In chapter Two (*Samkhya Yoga*), in verse 62 and 63, the pattern of behaviour (*stress response*) is given which ultimately leads to the destruction of man.

Verse 62:

“Brooding on the objects of the senses, man develops attachment (*Raga*) to them. From attachment (*Raga*) comes desire (*Kama*) and from desire, anger (*Krodha*) sprouts forth.”

Verse 63:

“From anger proceeds delusion; from delusion, confused memory; from confused memory the ruin of reason and due to the ruin of reason he perishes.”

In verse 64 of the second chapter, Lord Krishna also gives us a clue to equanimity of mind (*Samatvam*) and how to become a person settled in that equanimity (*Sthita Prajna*) who is not affected by the opposites of life (*Dwandwa*).

He says, "But the disciplined Yogi, moving amongst the sensory objects with all senses under control and free from attraction (*Raga*) and aversion (*Dweshha*), gains tranquility."

MANIFESTATION OF STRESS IN THE PANCHA KOSHA

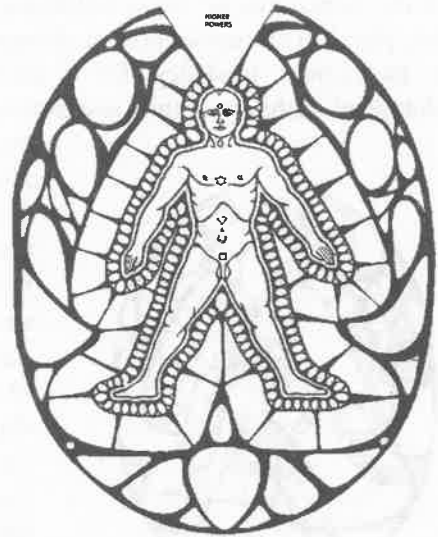
Nara: Psychic Disassociation

Yoga conceives man as a multi-bodied, multi-dimensional mind, a universal being, rather than simply body, mind and spirit. The limiting concepts of man as Eka Kosha, one body, has led to all the limitations of Western science whether that science be medical or philosophical.

Perhaps the saddest thing that has happened to man in his belief in the new religion called "science" is that he has failed to recognize the psychic aspects of man. It is true that antiquated religions put more emphasis on "saving the soul" of man than upon his material evolution. With the rise of science and its antagonism towards organized religion, it has been seen that science emphasises only the material aspect of life. Because of this, unfortunate

people needing medical treatment often suffer from the side effects of drugs used in the treatment of their disorders. And a whole new range of medical disorders has been produced by indiscriminate use of drugs, and medical treatment. Until medical science recognizes the spiritual side of man and the needs in these spheres, the treatment of disease will only create new disorders. These new disorders will be horrors in comparison with those conditions known in the past, with no known or foreseeable treatment for these maladies. Science must recognize clearly that "man cannot live by bread alone" nor can he be treated by drugs alone.

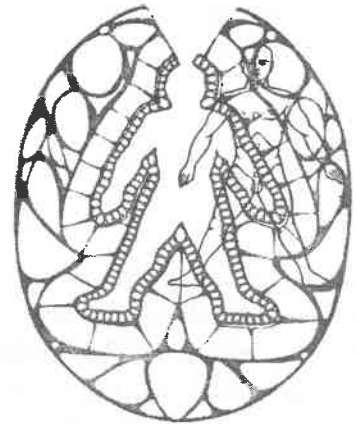
Man has five bodies, the Pancha Kosha. The physical body is called Annamaya Kosha, the body or sheath (Kosha) compounded (Maya) of cells (Anna). Pranamaya Kosha is the body or sheath made out of Prana, the vital forces of nature harmonized into the physical body by the life pumping action of the breath (Prana). This body or sheath is also known as the life-force body, the emotional body or the vital body. Manomaya Kosha is made up of the lower memory, mind or Chitta and the conscious mind, Manas. Vijnanamaya Kosha is the body permeated by the super-conscious mind or the Buddhi and the Ahamkara, the self-ideating principle of the higher mind. Anandamaya Kosha is the body of bliss, Anandam, and is the cosmic body or the cosmic egg.



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When the cosmic egg, Anandamaya Kosha, is perfectly centered by the lower bodies, then Samatvam, or equilibrium is said to exist. For the physical body, it represents homeostasis, or organic equilibrium. It represents Samabhava, mental equipoise, for the mind with all senses balanced and under control of the Buddhi, the higher spiritual intellect.

When the Annamaya Kosha is mal-aligned with the other four bodies, physical disassociation or disease appears. The body loses its normal tendency for a uniform and beneficial physiological stability within and between its various parts.



Psychic disorders may also be present but of a minor nature, such as being late for appointments or engagements, or constantly bumping into or “accidentally” hitting others. Watch a crowded street and see those with “NARA” attempting to waltz “around” unsuspecting victims. If you have ever met a person with “NARA” yourself, you know the tremendous embarrassment caused to both when you know that you must collide . . . and “do”. This will also answer so many questions about accidents that just seem to happen and cannot be avoided. A bicycle will swerve and hit the pedestrian. The cyclist claims there was “nothing he could do”. A car swerves out of traffic and a terrible accident takes place. Ships collide at sea, and aircraft run into each other thousands of feet in the air.

We notice the predisposition of certain people to accidents, so much so that they are called “accident-prone”. Others seem to have such a “bad run of luck” and ill fortune that they extract our pity. Some are chronically ill or emotional hypochondriacs. Minor accidents may escape the notice of all but a careful observer. Some people are continually ill or emotional hypochondriacs. Minor accidents may escape the notice of all but a careful observer. Some people are continually banging their heads on kitchen cupboards, shelves or car doors. Still others slam their fingers in doors and drawers of all types. Many bang their fingers when doing minor carpentry work. The “stumble-foot” is well known for “falling-up” as well as “falling down” stairs, or tripping while simply walking along the road or sidewalk.

If physical aberrations alone were the only manifestation of “Nara”, we might be able to deal with the situation in a purely physical way. Emotional and mental aberrations are even more widespread. Some signs of emotional “Nara” are constant disappointments in people and events, when events do not come up to our expectations or we are not able to fully participate because we are tired, run-down, or whatever the “Nara”. An Angel with “Nara” would be unhappy in heaven. “Nara” people are habitually late,

missing the good things of life. I know of a groom who missed his wedding, and the girl he still loves today married another man because she wanted the security of punctuality. I know of dozens of people who have missed jobs they are well qualified for by not applying on time. One case of heightened Nara was of a man who was chronically out of work because he was over-qualified for most jobs. After years of waiting his chance, a letter of appointment came in the mail. When he reported for duty, he discovered that he was late for the job as the letter had been held up in the mail. Even our postal service can have Nara.

What is the source of these strange conditions? A mal-alignment of the Pancha Kosha, the five bodies of man, is the answer. When you walk through a doorway, the psychic body aligns with the size of the opening. Your physical body should core the psychic body. If it is out of line to either side you will strike the door jam. If the physical body is either higher or lower than the psychic body, the head or feet will be constantly injured. Similar psychological and psychic events of a negative nature will be present in the life of the person suffering from this mal-alignment. The condition is called "Nara". Other symptoms of Nara are a chronic upset stomach, constant headache, constipation, or the radical opposite, a watery discharge from the bowel. The correction of this condition is easily brought about by the mastery of simple Pranayamas like Vibhagha Pranayama and Mahat Yoga Pranayama or more complicated Kriyas like the Anuloma-Viloma, Polarity Breath.

Can you imagine the spiritual state of most of us if Nara is a common state of man and woman . . . and it is! If the physical body is inharmonious with the higher bodies, accident and physical illness are present. If the vital body is out of line, all sorts of emotional and psychic distortions are to be seen. Mental states occur when the lower mind body is out of line with its lower counterparts. If all three lower bodies and the cosmic sheath, then untold tragedies occur. We may be far out of line in our spiritual drives. No doubt Nara has accounted for the proliferation of religions as well as weird cults. If the life of a Yogi is like "an arrow sent straight to its goal" then a state of total well being must be accomplished. Otherwise, our efforts will go astray.

Yoga is the practice we will call the "arrow" of the mind. The "bow" is the effort we put out. Balance is our aim. Yoga is our goal.

In Yoga Chikitsa (Yoga therapy) it is stressed that there is a basic Adhi-Vyadhi or psychosomatic basic for physical and psychological afflictions, but it is also readily admitted that there is a somato-psychic range of disorders caused by flesh eating, tobacco, drugs and alcohol.

Any of the four lower bodies may be out of harmony with the highest of the Pancha Kosha, the Anandamaya Kosha. The cosmic body is never out of line with its cosmic counterpart. The Anandamaya Kosha is like a Bindu within the Maha Bindu, a point within the cosmic point.

The physical body and the vital body may be harmonized, but be out of line with the higher bodies of the mind. When this happens, neurotic and psychotic tendencies develop. The lower mind may be in

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harmony with the lower bodies, but out of line with higher bodies. A hatred of higher spiritual things and mental disorders associated with persecution of one-self and others will develop.

Only perfect alignment that is Yoga represents well being whether the higher forces of the seven streams of consciousness, flow unhindered into the planes of human consciousness.

Stress or rather "distress" manifests not only in our physical body but also in the other Koshas (sheaths or bodies of man) in various ways.

ANNAMAYA KOSHA

- Neuro - endocrine imbalances. e.g. Diabetes Mellitus, Peptic Ulcer, Irritable bowel syndrome, Essential Hypertension, Coronary Artery Disease, Obstructive lung diseases (Asthma) and tension headaches.

PRANAMAYA KOSHA

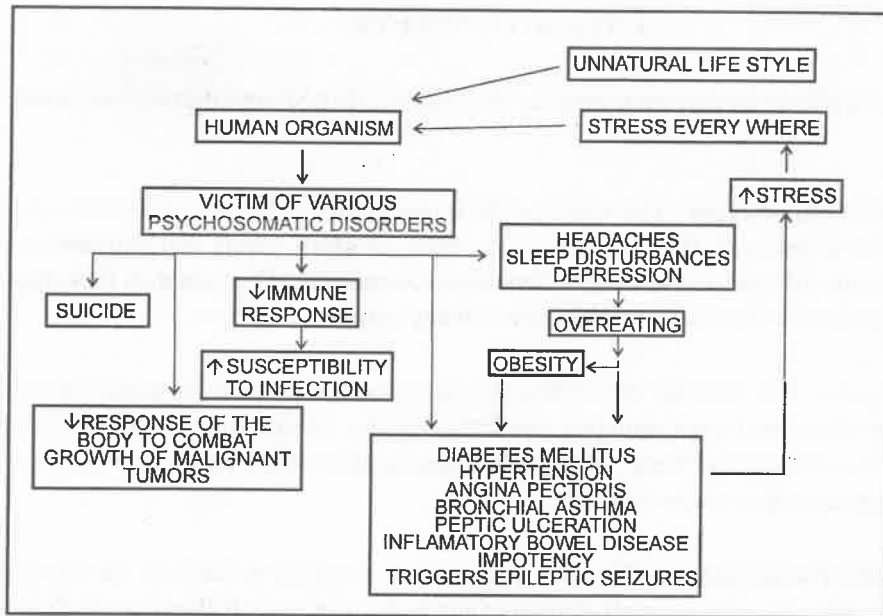
- Emotional disturbances. e.g. road rage, mood fluctuations.
- Breathing difficulties. e.g. Bronchial Asthma, COPD.
- Energy imbalances. e.g. Lethargy and the feeling of being "down in the dumps".

MANOMAYA KOSHA

- Mental problems and various psychiatric disorders e.g Depression, Schizophrenia, Hysteria, Bulimia, Mania, Anxiety Neuroses.
- Decreased quality of life.
- Increased amount of worries.

EFFECTS OF STRESS

- Physical and emotional disturbances.
- Psychological disturbances.
- Inability to work well.
- Dissatisfaction in life.
- Loss of productive work force for the nation.
- Burn out.
- Suicidal tendencies.
- Breakup of Human relationships.
- Unhappiness discontentment.
- Habits and addictions and
- Loss of 'zest' for life.



HEALTH PROBLEMS DUE TO STRESS

- Impaired immunity predisposing to infections recurrences as well as Cancer
- Anxiety Neurosis, Restlessness, Fatigue, Sleeplessness, Migraine
- Muscle Spasm leading to Tension Headaches, Backaches etc
- Palpitations, Hypertension, Ischemic Heart Disease, Arrhythmias
- Breathlessness, Bronchial Asthma, Allergies
- Peptic ulcers, Dyspepsia, Irritable Bowel Syndrome
- Sexual Problems, Menstrual Disturbances
- Diabetes mellitus, Thyrotoxicosis
- Autoimmune Diseases like Rheumatoid Arthritis
- Addiction to tea, coffee, tobacco, alcohol, drugs etc
- Eating Disorders, Obesity
- Autonomic Neuropathy

ROLE OF YOGA IN PREVENTING AND MANAGING STRESS

Yoga is a holistic science of life, which deals with physical, mental, emotional and spiritual health. Various aspects of Yoga help in the prevention and management of stress.

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1. YOGIC CONCEPTS:

Various Yogic concepts have guided man towards shaping his life and the interpersonal relationships in his social life.

- a. **Vasudhaiva Kutumbakam** - The whole world is one family. This is an excellent concept which helps one to understand that division on the basis of class, creed, religion and geographical distribution are all 'man-made' obstructions towards oneness. One can then look upon all as his own and can bond with everyone irrespective of any barrier.
- b. **Pancha Kosha** - The concept of our five sheaths or bodies helps us to understand how all our actions, emotions and even thoughts can influence our surroundings and that "No man is an Island". The concept of "Nara" or psychic disassociation helps us to be aware of why things happen to us and others in our daily life.
- c. **Chaturvidha Purusharthas** - The four legitimate goals of life tell us how we can set legitimate goals in this life and work towards attaining them in the right way, following our dharma to attain Artha (material prosperity), Kama (emotional prosperity) and finally the attainment to the real goal of our life, Moksha (spiritual prosperity).
- d. **Chatur Ashramas** - This concept of the four different stages in life, helps us to know how, what and when to perform the various activities in our life. **Brahmacharya** is the period from birth till 27 years and is the period for study, conserving the creative impulse and channeling it towards elevating spiritual pursuits. **Grahastha** is the period of responsibility, spanning the period from 27 - 54 years in which we learn to care about others in the family and the social network, fulfilling our dharma towards both the young and the old. **Vanaprastha** or retirement is the period after 54 years when one's life can be played over again and again in the mind with a sense of fulfillment and satisfaction having not to worry about anything at all. **Samnyasa** is the period of life when after performing our duties to the best of our ability for 81 years and after having attained perfection in life we renounce everything for the divine.
- e. **Pancha Klesha:** Avidya (ignorance), Asmita (ego), Raga (attraction), Dwesha (repulsion) and Abinivesha (urge to live at any cost) are the five Kleshas or mental afflictions with which we are born into this human life. Through Yoga we can understand how these control our life and see their effects on our behaviour. These 'Kleshas' hinder our personal and social life and must be destroyed through the practice of **Patanjali's Kriya Yoga**, which consists of Tapas, Swadyaya and Ishwar Pranidhana (Atman Prasadhanam).
- f. **Nishkama Karma:** Selfless action and the performance of our duty without any motive, are qualities extolled by the Bhagavad Gita which is one of the main Yogic texts. Performing one's

duty for the sake of the duty itself and not with any other motive helps us to develop detachment (Vairagya) which is a quality vital for a good life.

- g. **Karmasu Kaushalam:** 'Skill in action' is Yoga says Yogeshwar Krishna in the Bhagavad Gita. 'To do our best and leave the rest' is how Pujya Swamiji Gitananda Giri Guru Maharaj used to describe the best way of life. Even if we don't practice the other aspects of Yoga, we can be 'living' Yoga, by performing all our duties skill fully and to the best of our ability. A great artist, doctor, worker, singer or sportsman can be a Yogi by performing doing their duty to perfection and without care for the rewards of the action, even if they do not practice any Asana, Pranayama etc.
- h. **Samatvam:** 'Yoga is equanimity ' says the Bhagavad Gita. Development of a complete personality who is neither affected by praise nor blame through development of Vairagya (detachment) leads to the state of "Sthita Prajna" or "Sama Bhava". This is a state of mind which is equally predisposed to all that happens, be it good or bad. Such a human is a boon to society and a pleasure to live and work with.
- i. **Vairagya:** The concept of Vairagya (detachment) when understood and cultivated makes us dispassionate to the Dwandwa (the pairs of opposites) such as praise-blame, hot-cold or pleasant-unpleasant.
- j. **Yoga as a "way of life":** The regular practice of Yoga as a 'way of Life' helps to reduce the levels of physical, mental and emotional stress. This Yogic 'way of life' lays emphasis on right thought, right action, right reaction and right attitude.

2. HATHA YOGA AND JNANA YOGA

Yogic Asanas, Pranayamas and Jnana Yoga Kriyas, work on the various Koshas of our body and clear up all the subconscious 'quirks' in our brain from the billions of years of evolution from animal to the human state. An understanding of these 'quirks' helps us to understand our reaction to various situations and helps to prevent our 'stress response' to them. 'Stress Relievers' from Hatha Yoga and Jnana Yoga are of immense benefit in relieving the pent up emotions and the reaction to the stressful situation.

3. YAMA AND NIYAMA

The Pancha Yama and Pancha Niyama provide a strong moral and ethical foundation for our personal and social life. They guide our attitudes with regard to the right and wrong in our life and in relation to our self, our family unit and the entire social system. These changes in our attitude and behaviour will go a long way in helping to prevent the very causes of stress in our life.

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Pancha Yama :

Ahimsa	-	Non - Violence
Satya	-	Truthfulness
Asteya	-	Non-Stealing
Brahmacharya	-	Proper Channeling of the Creative Impulse
Aparigraha	-	Non Covetedness

These are the "DO NOT'S" in a Yoga Sadhaka's life. Do not kill, do not be untruthful, do not steal, do not waste your God Given creativity and do not covet that which does not belong to you. These guide us to say a big "NO" to our lower self and the lower impulses of violence etc. When we apply these to our life we can definitely have better personal and social relationships as social beings.

Pancha Niyama

Shaucha	-	cleanliness
Santosha	-	contentment
Tapas	-	discipline
Swadhyaya	-	study of one's-self
Ishwar Pranidhana	-	reverential gratitude towards the Divine Self
(Atman Prasadhanam)		

The Pancha Niyamas guide us with "DO'S" - do be clean, do be contented, do be disciplined, do self - study (introspection) and do be thankful to the divine for all of his blessings. They help us to say a big "YES" to our higher self and the higher impulses. Definitely a person with such qualities is a God-send to humanity.

Even when we are unable to live the Yama and Niyama completely, even the attempt by us to do so will bear fruit and make each one of us a better person and help us to be of value to those around us and a valuable person to live with in our family and society. These are values which need to be introduced to the youth in order to make them aware and conscious of these wonderful concepts of daily living which are qualities to be imbibed with joy and not learnt with fear or compulsion. The parents can by example to show their children the importance of these qualities. When the children see the good examples of their parents they will surely follow them sooner or later.

4. IMPORTANCE OF THE RIGHT ATTITUDE

"To have the will to change that which can be changed, the strength to accept that which can not be changed, and the wisdom to know the difference" is the attitude which needs to be cultivated. An attitude of letting go the worries, the problems and a greater understanding of our mental process helps to create a

harmony in our body and mind. The disharmony is the main cause of 'Aadi, Vyadhi' or the Psychosomatic disorders.

5. PRANAYAMA

The practice of Pranayama helps to regulate our emotions and stabilize the mind, which is said to be as restless as a 'drunken monkey bitten by a scorpion'. Animals that breathe slowly are seen to be of less excitable nature than those who breathe rapidly and a similar observation holds true for humans. Even when we get angry, we can experience that our breathing becomes rapid and it is slower when we are cool and relaxed. Thus the slow, rhythmic and controlled breathing in Pranayamas leads to the emotional control seen in many Yoga Sadhakas.

6. PRATYAHARA

Pratyahara Kriyas help to distance our self from the sensory objects, attraction to whom is said to be the initial step in the causation of stress in man. Here, we withdraw our self from the senses and then are not affected by them. We realize how false the senses are in reality, and then do not get either attracted to them nor feel any revulsion towards them.

7. DHARANA AND DHYANA

Dharana and Dhyana, help to focus our mind on the right ideals and pursue our goals in a spirit of "Nishkama karma" (selfless action) and "Karmasu Koushalam" (skillful actions). Development of clarity of thought appears when we are a 'Stitha Prajna' (person of mental balance) and have 'Sama Bhava' (equal reaction to the opposites). Proper sleep patterns and a subjective feeling of wellness are produced by Yoga and this in turn leads to better human relationships, proper attitudes, increased production at work and the greater good for the individual, family, nation and ultimately for the whole of humanity.

8. BHAKTI YOGA

Bhakti Yoga, enables us to realise the greatness of the Divine and understand our puniness as compared to the power of the Divine or nature. We realize that we are but 'puppets on a string' following his commands on the stage of the world and then perform our activities with the intention of them being an offering to the divine and gratefully receive HIS blessings.

9. NADA YOGA AND MANTRA YOGA

Music and the chanting of Mantras with devotion helps to elevate the mind into a higher plane where the individual transcends his problems and can look at things in the right perspective. A detached view of our life can help us to see our self in the true reality. The divine manifests in various ways and the loss of our individual ego enables us to see the divine Self that is there within us and also within all beings.

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THE SCIENCE OF YOGA

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Abstract

Human brains emit four types of waves, which can be recorded by an instrument called Electroencephalograph (EEG). They are: Beta (β), Alpha (α), Theta (θ), Delta (δ). This article explains Alpha wave, since this state is attained during meditation. The study of Alpha is now generally called 'Alphamatics' and this article can be treated as an "Introduction to Alphamatics", with special reference to Meditation or Dhyana.

A simple technique of meditation to attain Alpha is given at the end.

I- Electric Waves Emitted by the Brain

The human brain can be treated as living biological computer, available for *cybernetic study and research. It emits four distinct kinds of electric waves, which can be recorded and studied using an instrument called 'Electro-encephalograph' or EEG in short. Almost all psychiatrists use EEG machine professionally.

An Austrian Scientist named Hon. Berger invented the EEG machine in 1929. The profiles of the EEG accurately reflect the mental condition of any patient or meditator.

It is found that these brain-waves are in four streams like TV or Radio Channels. Each has a definite frequency range, amplitude and pattern as profile. Actually, the state or condition of our mind is determined by these waves. Luckily, each stream (as type) has its own features and can be tackled independently. This facilitates the study and control of the human brain in a systematic analytical way.

Since Meditation is the seventh limb of Yoga, which deals with the control (or even manipulation) of our mind, the present article on Alphamatics serves as a scientific approach to Meditation (especially passive) and even to the state of Samadhi in a Yogic Sense.

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* 'Cybernetics' is the science of the computer.

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The following Table gives the basic data on these waves:

Sl. No.	Type	Frequency CPS or Hz	State of Mind	Remarks
1	Beta (β)	14 to 30 or more	Fully conscious or awake	Left Brain predominant. Frequency increases with activity.
2.	Alpha (α)	7 to 14	Restful state. Sleeping or day dreaming. Sub-conscious mind is open	Right Brain dominates, sub conscious mind takes over. Necessary for good health and to solve problems.
3.	Theta (θ)	3.5 to 7	Deep sleep or unconscious	Practically Ego-less and best for meditation.
4.	Delta (δ)	0.5 to 3.5	Hybernetic sleep Yogic Sleep; Samadhi state.	Only Yogis can reach this ultimate Samadhi. Don't try.

Some explanatory remarks are necessary to grasp the full significance of the above Table

It is clear that the brain becomes calmer and steady as the wave frequencies decrease. Psychosomatic diseases and stresses can be overcome if you suppress Beta and remain at Alpha state. The technique to achieve this is called 'Attaining the Alpha State' and it is a Bio-feed back technique (we will go into the details in the coming sections). If Beta dominates and the wave frequencies are on the higher side, one becomes a candidate for diseases like High B.P., Sugar, Acidity, Ulcers, Insomnia, etc. If one crosses 30 Hz, mental balance is lost with undesirable consequences.

II- Some facts and features of the Brain Waves

Many facts and features of the Alpha state are not commonly known. Many times the basics of Alphamatics should be made compulsory to Yoga students. Hence, I have listed them in some detail.

1. You are always in the Beta state whenever you are awake (The other states are also present simultaneously but Beta (β) dominates).
2. You are definitely in Alpha state either when you are asleep or drowsy.
3. The wave frequencies will decrease as you go deeper. In deep sleep, Beta waves disappear and Theta will take over though you are in Alpha state.
4. If you sleep 'like a log' or lose consciousness, you are in the lower wave frequencies of Theta (You are not capable of dreaming).
5. Going below Theta, is reaching Delta, is possible only as a Yogic feat or Samadhi. Some Yogis demonstrate this by getting themselves buried alive for a few days and are then brought back.

This is the hypernetic state when all biological functions like heart-beat and breathing are temporarily suspended (this is the Delta state and other states vanish).

6. Of course, below Delta, death occurs if wave frequency reaches Zero.
7. Any major disturbances or problem set up perturbations in the EEG waves leading to mental imbalance.
8. A calm healthy mind gives smooth, regular and harmonic profiles of the waves. This is an index of your mental health.
9. An unborn child in the mother's womb (foetus) is in Delta until it is born.
10. Toddlers (from 0 to 3 years) are in Theta state. They have yet to negotiate with external reality. (Hence, neither Alpha nor Beta state are activated).
11. Children under 12, are in Alpha state even when they are awake. (They are immune to psychosomatic diseases for this reason.)
12. Adolescence is the sign of reaching Beta state. As you take on more and more responsibilities as an adult, your Beta frequencies will increase and predominate. In a sense, your left-brain takes over suppressing right brain activities.
13. Our left-brain can use only 5% capacity of our brain and severe limitations are imposed when we are awake (Beta state).
14. But our right brain has not such limitations since it controls our subconscious mind. In other words, our brain capacity or efficiency increases 20 times if we can manage to be in Alpha state.
15. The technique of switching over to Alpha state (or even Theta state) from Beta state is called Bio-feed back.
16. A special auxiliary attached to an EEG machine can be used for this. Such a bio-feed back device is called in a 'Mind Machine'.
17. But pure meditation techniques can be used for bio-feed back in lieu of mind machines. A technique to do this is given in this article.
18. Another fantastic feature of Alpha state is that one can transcend the normal senses and become clairvoyant. The door to the paranormal will open and you can get in touch with cosmic forces and phenomena.

III -Some Benefits of Attaining Alpha

A practical comparison between Beta and Alpha states reveals that one must go to Alpha to uncover your subconscious mind to avail of its benefits. But the catch is that you have to be awake to do anything and when you are awake you are automatically in Beta.

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Hypnosis is one way to open your subconscious when you are awake. But, then you will not be under your control. The Bio-feed back method of attaining Alpha state is not only natural but also simple. You will get all the benefits of restful sleep during Alpha state. I have listed below some major benefits of attaining Alpha state.

1. 10 to 15 minutes of Alpha practice (or meditation) gives you full rest equivalent to 6 hours of sound sleep. (If you are an over-busy person, you can snatch 10-15 minutes of your time anywhere, anytime to compensate for 6 hours lost sleep).
2. If you find a difficulty to get sleep when you go to bed, go to Alpha state till you go to sleep. Practice this daily if you are an insomniac.
3. Alpha practice is a definite cure for High B.P., type-II Sugar, Acidity and other Psychosomatic diseases.
4. Regular Alpha practice will change your personality to the core. You will become more tranquil, lovable and respected.
5. The wear and tear of the modern fast hi-tech life will not affect you. You will become self-confident and mature.
6. You will develop, ESP and will power. You will also become 'lucky' in your dealings.
7. Your routine problems will be automatically solved since your subconscious mind takes over.
8. Your IQ and learning capacity will increase.
9. Your resistance power (immunity to diseases) will increase and you will start reversing age.
10. Zest for life will increase and there will be a marked improvement in all aspects of your life.

IV -Technique of Attaining Alpha State

The profile of our brain waves depend on two factors:

- (i) Internal state of our mind and
- (ii) External condition (environment.)

You can always manipulate the latter but controlling the mind is not easy.

I conduct regular half-day courses to attain Alpha state through Meditational approach. Before I discuss this technique, let me give some background information in this field.

It is obvious that any rhythmic or regular stimulatory signal should modify our brain wave patterns (as in forced oscillations). This phenomenon is called 'Frequency Following Response' (FFR) and the modification effected is called 'Brain Wave Entrainment' (BWE). The stimulating signals like pulsating sound or light are produced by a gadget called 'Brain Wave Synchronizer' (BWS) which is popularly called a Mind Machine.

Stroboscopes, turning fans, interrupters etc. can be used as the stimulating signal generators. Note that these are also eminently suitable to induce hypnosis. Hypnotic induction should never be confused with Alpha state.

I have given below a simple and an advanced technique for attaining Alpha state. The simple technique has been developed by the Silva Mind Control Group (Jose Silva) and the advanced method is an extension of the same modified as a Meditational Technique by me.

(A) Simple Technique

You can try this regularly after the day is done. It will not only help you to solve your problems overnight but will also cure your insomnia (if you are a poor sleeper).

Step-1: Lie in your bed with the intent of going to sleep, minimise external disturbances and ensure peace switch off the light and close your eyes.

Step-2: Focus your attention on breathing and follow its rhythm, with out attempting to control it.

Step-3: Mentally start counting slowly the serial numbers 100 to 1 in the descending order (count down). Do not suppress any thoughts and let them flow freely.

Step-4: You will be in Alpha state when you reach 1.

Step-5: Continue in this state as long as you please. (It is good for you if you can go to sleep before reaching the final step.

Step-6: If you want to return to Beta state count upwards from 1 to 5 and then open your eyes. You can even switch on your light if you want. You are in Beta state as soon as you open your eyes.

(B) Meditational Technique

This is an autogenic technique, which makes use of visualization, meditation, and a mental screen. Try the following before you begin the procedure:

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Sit with your eyes closed. Imagine that your head is a camera and that your brain is a projector. Your mind's eye (3rd eye or the hidden eye between your brows) is like the camera lens. Erect a blank white screen about 3-4 feet away from you, to enable you to 'throw' any idea, images or visualized entities on to it. Your closed eyes must be tilted upwards, making an angle of 200 (approx) with the horizontal.

Now you are ready to start the Meditative Exercise to attain Alpha state:

1. Select a well-ventilated lonely place.
2. Squat on the ground comfortably, (use a chair if you want).
3. Close your eyes and visualize a blank TV screen in front of your eyes.
4. Project or throw any thoughts / pictures you get onto that screen (Area around the screen should be dark).
5. Become aware of your breath and gradually regularize your breathing.
6. Take a deep breath and exhale slowly. Imagine that you are expelling number 10. From your nose while exhaling.
7. Inhale slowly and throw out number 9 while exhaling.
8. Continue the count down (8, 7, 6....) during successive exhalations, till you reach 1.
9. You have reached Alpha state (though awake and you can remain in that state as long as you like (at least 10-15 minutes).
10. Count up from 1 to 5 and open your eyes slowly to terminate Alpha state, Gently palm your eyes before opening.

Now you are back to Beta state.

V- Conclusion and Acknowledgement

I have been conducting Alpha Training Workshops for the last few years in India and Abroad and I have yet, to come across negative feedback. Some students, who have attended my seminars, have derived many benefits claimed by me. One can even check the claims using EEG machines on batches of Alpha-practitioners.

As they say 'Experience is the best teacher'. However, my thanks are due to many authors and authorities in this field. They are too innumerable to record here.

UTILITIES OF SELECTED YOGIC PRACTICES IN HEALTH RELATED FITNESS

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Abstract

The ultimate aim of all cultural practices is to produce psycho-physiological balance in various systems working in an individual. Proper organic function depends upon three important factors i.e.: a) Uninterrupted supply of nutrients to the tissues of the body through blood supply with healthy functioning of endocrine glands. b) Proper elimination of waste products and c) Better functioning of nervous system.

Asanas like Bhujangasana, Shalabhasana and Dhanurasana etc. help a lot in this regard. Here the backward (paschimo) muscles are contracted and frontal muscles are stretched, while in paschimotanasana, the posterior muscles are wonderfully stretched. Uddiyana, Nauli help the diaphragm to be raised thereby giving good massage form downward to the heart. Practices like Bhujangasana, Salabhasana, Dhanurasana, alternatively exert pressure in heart. b) Healthy respiratory muscles with elasticity wherein no air should remain idle. c) Cleansed respiratory passage. In this context, Uddiyana, Nauli and Kapalabhati help a lot to build -up powerful respiratory muscles. Deep inspiration in Shalabhasana and Dhanurasana and deep expiration in Uddiyana and Nauli help to build up elastic respiratory muscles while Kapalabhati cleanses the respiratory passage forcefully. As far as the adrenals are concerned, this is made active through Bhujangasana, Shalabhasana, Dhanurasana, Uddiyana and Nauli practices. The practies especially Shirshasana, Viparitakarani and Sarvangasana work wonderfully for better venous return. These Yogic practies are not available in Physical education programmes or even in sports (2).

Keywords

Yoga, Physical Education, Cultural Practices, Health and Fitness

For the last one or two decades, Yoga in the form of Philosophy as well as Science is becoming very popular (3). In this context, some good works in both the fields have been done in India and abroad in the past. In the recent past, in an International Yoga Conference held at Kaivalyadhama, various research workers also suggested the utilities of the same (1) Therefore, the purpose of this article is to bring out a few rationale of these practices.

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The ultimate aim of all cultural practices is to produce psycho-physiological balance in various systems working in an individual. The key point is on spinal cord movements at all possible levels (i.e. forward, backward, sideways, twist/ torsion) and finally having an impact on higher system.

All the meditative poses are having broad based and least resistance to the body, against the centre of gravity and thereby controlling over BMR, heart rate, pulse rate and thereby preparing a good background for pranayama and higher practices.

The proper organic function depends upon three important factors i.e.: a) Uninterrupted supply of nutrients to the tissues of the body through blood supply with healthy functioning of endocrine glands, b) Proper elimination of waste products and c) Better functioning of nervous system.

The movement of abdominal wall for 24 hours through proper inhalation and exhalation due to breathing has got an impact over regular massage over organs situated in the same. This is further regularized by the Yogic Poses like Uddiyana, Nauli*and Agnisara and various asanas.

The diaphragm goes down and forward in each inhalation say about 16 to 18 times per minute by helping digestive organs. This can happen only when abdominal muscles are strong enough and elastic. If they are not, the end result will be indigestion. Dyspeptic people are found to be either very rigid in abdominal muscles or too weak.

When the muscles are kept strong and elastic when they are stretched and contracted, Asanas like Bhujangasana, Shalabhasana and Dhanurasana etc, help a lot in this regard. Here the posterior (paschim) muscles are contracted and frontal muscles are stretched, while in paschimotana, the posterior muscles are wonderfully stretched (tana).

The circulatory system has got the work of sending nourishment to the cells and the tissues. The arteries, veins, capillaries and heart are the sole agent through which blood is circulated. Uddiyana and Nauli help the diaphragm to be raised thereby giving good massage from downward to the heart. Practices like Bhujangasana, Shalabhasana, Dhanurasana, alternatively exert pressure on heart. The first stage of Viparitarani, Sarvangasana also give good positive (+) pressure to the heart and thereby help in increasing the efficiency of the same.

Since the veins are the weakest of all and for twenty-four hours, they have to work to return the impure blood (blue blood) back to the heart; they have got a lot of workload upon them. They are being helped by as well as topsy-turvy practices mainly. As a result, an individual suffering from varicose vein gets a lot of help and the pain as well as swollen condition is reduced for they are externally helped (5)

Once circulatory system is helped proteins, fats, sugar and salt are distributed to all the tissues and at the same time respiratory muscles and the lungs also get better exercise when one does Bhujangasana, Shalabhasana, Dhanurasana, and Mayurasana. Thereby all the cells get oxygenated. To have this, three conditions are to be fulfilled: a) both the lungs should be in good condition and powerful, b) Healthy respiratory muscles with elasticity wherein no air cell should remain idle, c) Cleansed respiratory passage. In this context, Uddiyana, Nauli and Kapalabhati help a lot to build-up respiratory muscles powerful. Deep inspiration in Shalabhasana and Dhanurasana and deep expiration in Uddiyana and Nauli help to build up elastic respiratory muscles while Kapalabhati cleanses the respiratory passage forcefully. Nasal passage obstruction may be due to chronic nasal cataract and deviated septum, mucus etc. The first two cannot be dealt with but mucus can be eliminated by various Kriyas like Kapalabhati, Danda Dhauti, Vastra Dhauti, Jala and Sutra Neti.

Although cases like Adenoids, Deviated Nasal Septum, Polyps cannot be tackled, some Asanas and other practices that deal with Tonsils are Viparitakarani, Sarvangasana, Matsyasana, Simha Mudra, and Jihva-Bandha. The Nasal Catarrh also is benefited with these.

Even though, to a great extent, asanas help in sending nourishment to each cell through the improvement of respiratory and circulatory enhancement, nevertheless, endocrine glands also become very much active. Proper glandular secretion is also necessary to have better health and fitness of an individual. Once any one of the glands is inactive, one has to face the serious problem in life. In this context, Asanas like Viparitakarani, Sarvangasana, Matsyasana and Mudras like Simha and Jihva help a lot to take care of the same so far as thyroid gland is concerned. While pineal and pituitary glands are taken care of through Shirsasana as far as the adrenals are concerned, these are made active through Bhujangasana, Shalabhasana, Dhanurasana, Uddiyana and Nauli practices. To look after the male and female endocrine glands respectively like testes and ovaries, Sarvangasana, Uddiyana and Nauli work very effectively. So, the above Yogic practices help maximally in maintaining the organic functions of the body.

The waste products (malas) as impurities are regularly to be eliminated from the body as they create toxins. If the impurities (malas) remain inside the body, these become poisonous and one suffers from various ailments. Hence, three important systems like respiratory, digestive, and excretory (elementary cannals) should be kept cleansed. In this context, practices like Jala Neti, Vastra, and Danda are effective dhauties to take care of such systems.

Finally, the nervous system is equally important to be taken care of to bring about efficiency in all walks of life of the individual. The practices especially like Shirsasana, Viparitakarani, and Sarvangasana work wonderfully for better venous return. These Yogic practices are not available in physical education programmes or even in sports (2).

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This is not exhaustive utility of Yogic practices as such. The selected Yogic practices as a whole could be utilized very effectively in our day-to-day lives (6) for it proves beyond doubt that these Yogic practices satisfy almost all the conditions upon which health and fitness the lie as proved in a recent study (1)

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इच्छा—मृत्यु प्राणायाम

स्वामी अनन्त भारती*

जिस प्रकार कोई व्यापारी दिल्ली मुम्बई आदि में किसी विशेष व्यक्ति से मिलने या, किसी कार्य के लिए जाता है, जब तक उसका कार्य पूरा नहीं होता, तब तक वह उस कार्य को, उस उद्देश्य को पूर्ण करने के लिए वहीं रहना चाहता है, जिससे उसे उस कार्य के लिए पुनः आने की आवश्यकता न हो, भले ही वह दो चार दिनों के लिए ही वहां रहने की योजना से क्यों न आया हो। क्योंकि पुनः आने में तैयारी और यात्रा में समय और धन का अतिरिक्त व्यय होगा। किसी परिस्थिति विशेष में ही इसका अपवाद हो सकता है। इसी प्रकार हिमालय आदि पर्वतों पर किसी वनस्पति की खोज में गया हुआ व्यक्ति, जब तक उसे अभीष्ट वनस्पति नहीं मिल जाती, वह तब तक वहां रहकर उसकी खोज में लगा रहता है। ठीक इसी प्रकार जो व्यक्ति या साधक इस जीवन का, इस संसार में आने का अपना कोई उद्देश्य विशेष जान लेता है, या निर्धारित कर लेता है, जिसके जीवन का एक लक्ष्य है, वह परिस्थिति विशेष को छोड़कर तब तक इस संसार में रहना चाहता है, जब तक उसका उद्देश्य पूर्ण नहीं हो जाता है, जब तक उसे अपने लक्ष्य की प्राप्ति नहीं हो जाती।

सामान्यतः भारतीय संस्कृति में जीवन के चार पुरुषार्थ (उद्देश्य) स्वीकार किये जाते हैं: 'धर्म अर्थ काम और मोक्ष। मोक्ष का अर्थ है जन्म मरण के चक्र से, जरा मरण के दुःखों से संदा के लिए छुटकारा।' जन्म मरण के चक्र का मूल कारण है अविद्या आदि क्लेशों से उत्पन्न वासना रूप कर्माशय।¹ अविद्या आदि क्लेशों से उत्पन्न कर्माशय के नाश के लिए विवेक ख्याति विशुद्ध ज्ञान के अर्जन की आवश्यकता होती है।² विवेक ख्याति अर्थात् आत्मज्ञान दो चार दिन या दो चार मास या वर्षों में प्राप्त होने वाला नहीं है। इसके लिए निरन्तर प्रयास की, अभ्यास की आवश्यकता होती है। अनेक जन्म भी लग सकते हैं। इसलिए सुबुद्ध साधक चाहता है कि इसकी प्राप्ति के लिए जितनी साधना करनी है, उतनी इसी जन्म में पूरी हो सके तो उत्तम है। क्योंकि नवीन जन्म में बीस पच्चीस वर्ष में शरीर की ही तैयारी पूर्ण हो पाती है। इसलिए बुद्धिमान् साधक दीर्घजीवी होकर वर्तमान जीवन में ही मोक्ष प्राप्ति के योग्य होना चाहता है, अधिक से अधिक पूर्णता पाना चाहता है। इसलिए प्राचीन काल के ऋषि मुनियों ने दीर्घ जीवन की कामना की और इसके लिए उपायों का अनुसंधान करने का प्रयत्न किया। यजुर्वेद में सामान्य व्यक्ति की कामना को 'पश्येम शरदः शतं, जीवेम शरदः शतं, शृणुयाम शरदः शतं, प्रब्रवाम शरदः शतमदीनाः स्याम शरदः शतम्भूयश्च शरदः शतात्'³ अर्थात् हम सौ वर्षों तक देख सकें, अदीन रहकर जीवित रह सकें और इससे भी अधिक यह सब हम प्राप्त करें, इत्यादि शब्दों में प्रार्थना के रूप में निबद्ध किया गया है। इतना ही नहीं एक अन्य मन्त्र 'त्र्यायुषं जमदग्नेः कश्यपस्य त्र्यायुषम्, यदेवेषु त्र्यायुषं तन्नो अस्तु त्र्यायुषम्' में जमदग्नि कश्यप और देव बनकर तीन गुनी अर्थात् सामान्यतः तीन सौ वर्षों की आयु की कामना की गयी है। इसी प्रकार काण्ड 2. सूक्त 4,13,21 का. 3. सू. 41, 47, 76 इत्यादि अनेक सूक्तों में दीर्घयुष्य प्राप्त करने की कामना उपायों के संकेत के साथ की गयी है।

आयुर्विज्ञान के प्राचीनतम आचार्यों में अन्यतम आचार्य चरक ने दस ऐसी वनस्पतियों के समूह का परिगणन किया है, जो उनके अनुसार जीवनीय हैं।⁴ इसी प्रकार आचार्य सुश्रुत ने विडडंग फल की फाकों के चूर्ण का

* निदेशक, स्वामी केशवानन्द योग संस्थान, रोहिणी, दिल्ली-85

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अलग-अलग पांच अनुपानों के साथ प्रयोग करने का निर्देश किया है, जिनका निर्धारित नियमों के साथ प्रयोग करने से एक सौ वर्ष आयु में वृद्धि होती है, और दस बार यह प्रयोग किया जा सकता है। इस प्रकार कोई व्यक्ति ग्यारह सौ वर्षों तक जीवित रह सकता है। इस प्रकार सुश्रुत और अग्नि पुराण में तीन सौ पांच सौ वर्ष आयु में वृद्धि के लिए अनेक प्रयोग निर्दिष्ट हैं।⁹

आयुष्य में वृद्धि अथवा जब तक इच्छा न हो तब तक मृत्यु को स्वयं से दूर रखने के लिए योग साधकों ने भी संभवतः अनेक उपायों का अनुसंधान किया था। किन्तु जिस प्रकार औषध प्रयोग के साथ आहार विहार के अनेक कठोर नियम बताये गये हैं, उसी प्रकार योग साधना में भी आहार-विहार के विविध नियम दृढ़ता पूर्वक पालन करना आवश्यक है। बहुधा लोग नियम में प्रमाद करते हैं इसलिए, अथवा दुर्जन अनधिकारीजन इनका प्रयोग करके चिरकाल तक अनाचार का प्रसार न कर सकें, इसलिए इच्छामृत्यु प्राप्त करने की साधना विधि का, दूसरे शब्दों में इच्छामृत्यु प्राणायाम की विधि का समग्र रूप से एकत्र वर्णन न करके खण्डों में इतस्ततः वर्णन या संकेत किया गया है। जिनका संकेत निबन्ध में यथावसर किया जायेगा।

इच्छामृत्यु साधना पूर्वकाल में बहुत प्रचलित रही है, जिसके फलस्वरूप अश्वत्थामा, बलि, व्यास, हनुमान आदि चिरजीवी रहे हैं, और शायद आज भी जीवित हैं, ऐसी पारम्परिक मान्यता निम्नलिखित पद्य से विदित होती है :-

**“ अश्वत्थामा बलिव्यासो हनुमांश्च बिभीषणः ।
कृपः परशुरामश्च सप्तैते चिरजीविनः ॥”**

द्वापर युग के अन्त तक अर्थात् महाभारत काल तक इच्छामृत्यु की साधना समाज में कुछ लोगों को विदित थी और उन्होंने इसमें सफलता प्राप्त की थी ऐसा संकेत हमें महाभारत में मिलता है। यद्यपि महाभारत महाकाव्य के एक अंश, जिसे भगवद्गीता के नाम से जाना जाता है, के अनुसार विवस्वान्, मनु, इक्ष्वाकु आदि राजर्षियों में प्रचलित योग परम्परा उस काल तक नष्ट हो चुकी थी।¹⁰ इतना होने पर भी भीष्मपितामह, द्रोण, वसुदेव, बलराम, श्रीकृष्ण, विदुर और धृतराष्ट्र आदि को यह साधना सिद्ध थी, इसका विवरण हमें महाभारत में मिलता है।

भीष्म पितामह के सम्बन्ध में आर्य (हिन्दू) परम्परा के प्रायः सभी लोग जानते हैं कि मृत्यु उनके वश में थी, किन्तु इच्छामृत्यु प्राणायाम रूपी साधना के लुप्त हो जाने या गुप्त होने के कारण एक कहानी की कल्पना करके जोड़ दिया गया कि उन्हें 'इच्छामृत्यु' का वरदान प्राप्त था। किन्तु द्रोण, वसुदेव, बलराम आदि के सम्बन्ध में भी महाभारत में स्पष्ट देखकर यह स्वीकार करना आवश्यक हो जाता है कि वरदान के कारण नहीं, अपितु साधना विशेष के कारण मृत्यु उनके वश में थी। महाभारत में स्पष्ट उल्लेख है कि अर्जुन के बाणों से विंध जाने पर जब भीष्म गिर गये और बाणों की शय्या बन गयी, तब भी मृत्यु उन्हें न ग्रस सकी। अपितु—

**धारयामास च प्राणान्पतितोऽपि हि भूतले ।
उत्तरायणमन्विच्छन् भीष्मः कुरुपितामहः ॥”**

अर्थात् 'उत्तरायण में प्राणत्यागने की इच्छा से उत्तरायण की प्रतीक्षा में भीष्म प्राणों को धारण किये रहे।' इस अवसर पर पार्वती द्वारा हंस रूप में महर्षियों की जिज्ञासा का शमन करते हुए वे कहते हैं :-

‘तानब्रवीच्छान्तनवो नाहं गन्ता कथंचन।
दक्षिणायन आदित्ये एतन्मे मनसि स्थितम्॥’¹²

अर्थात् मेरे मन में यह निश्चय है कि मैं सूर्य के दक्षिणायन रहने पर प्राणत्याग नहीं करूँगा।

‘धारयिष्याम्यहं प्राणानुत्तरायणकांक्षया।
ऐश्वर्यभूतः प्राणानामुत्सर्गे नियतोह्यहम्।
तस्मात्प्राणान्धारयिष्ये मुमुर्षुरुदगायने॥’¹³

अर्थात् मैं उत्तरायण की प्रतीक्षा करते हुए अपने प्राणों को धारण करूँगा। उचित समय पर प्राण त्याग करना मेरे वश में है, इसी कारण मैं उत्तरायण में मरने की इच्छा करूँगा। इसके अनन्तर उन्होंने सूर्य के उत्तरायण होने पर माघ मास के शुक्ल पक्ष की अष्टमी तिथि एवं प्रजापति देवता वाले रोहिणी नक्षत्र में योगस्थ होकर क्रमशः प्राणों को ऊपर ले जाकर अन्य सभी मार्गों को बन्द करके मूर्धा का भेदन करते हुए ब्रह्मरन्ध्र से प्राणों का निर्गमन किया यह महाभारत के निम्नलिखित पद्यों में स्पष्ट है :-

शुक्लपक्षस्य चाष्टम्यां माघमासस्य पार्थिवः।
प्राजापत्ये च नक्षत्रे मध्यं प्राप्ते दिवाकरे।
निवृत्तमात्रे त्वयने उत्तरे वै दिवाकरे।
समावेशयदात्मानम् आत्मन्येव समाहितः।
धारयामास चात्मानं धारणासु यथाक्रमम्।
तस्योर्ध्वमगमन् प्राणाः सन्निरुद्धाः महात्मनः।
सन्निरुद्धस्तु तेनात्मा सर्वेष्वायतनेषु च
जगाम भित्त्वा मूर्धानं दिवमभ्युत्पपात च॥’¹⁴

भीष्म के समान महाधनुर्धर आचार्य द्रोण को भी इस साधना में सिद्धि प्राप्त थी। तभी भीम द्वारा अश्वत्थामा हाथी का वध होने के उपरान्त घोष के साथ, ‘आश्वत्थामा हतः’ की ध्वनि गुंजरित होने पर द्रोण को भ्रम हुआ कि क्या उनके पुत्र अश्वत्थामा का वध हुआ है। उन्होंने युधिष्ठिर से समाधान चाहा किन्तु कृष्ण आदि द्वारा शंख ध्वनि कर देने पर उन्हें सत्य का बोध न होकर अपने पुत्र की मृत्यु का ही भ्रम हुआ और वे प्राण विसर्जन के लिए सबको अभय दान देते हुए शस्त्र त्याग कर रणभूमि में ही योगस्थ हो गये। यह भिन्न बात है कि उनके योग-युक्त होने पर द्रुपद के पुत्र धृष्टद्युम्न ने पिता का प्रतिशोध लेने की भावना से उनका सिर धड़ से अलग कर दिया।

‘उत्सृज्य च रणे शस्त्रं रथोपस्थे निविश्य च।
अभयं सर्वभूतानां प्रददौ योगमीयिवान्।
तस्य तच्छिद्रमाज्ञाय धृष्टमनः प्रतापवान्।
तस्य मूर्धानमालम्ब्य विचकर्त्तासिना शिरः॥’¹⁵

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भीष्म और द्रोण ही नहीं विदुर, धृतराष्ट्र आदि भी योगस्थ होकर प्राण विसर्जन की साधना में सिद्ध थे। महाभारत के अनुसार जब युधिष्ठिर आदि पाण्डव धृतराष्ट्र, कुन्ती, गान्धारी आदि से मिलने के लिए आश्रम में गये और विदुर के सम्बन्ध में पूछा तो पता चला कि कभी-कभी वे दिखाई पड़ जाते हैं—

‘कुशली विदुरः पुत्रो तपो घोरं समाश्रितः ।
वायुभक्षो निराहारः कृशो धमनिसन्ततः ।
कदाचिद् दृश्यते विप्रैः शून्येऽस्मिन्कानने क्वचित् ।।¹⁶

विदुर विषयक चर्चा चल ही रही थी तभी—

‘दूरादालक्षितः क्षत्ता तत्राख्यातो महीपतेः ।
निवर्तमानः सहसा राजन् दृष्ट्वाऽऽश्रमम्प्रति ।
तमन्वधावन्नृपतिरेक एव युधिष्ठिरः ।
प्रविशन्तं वनं घोरं लक्ष्यालक्ष्यं क्वचित् क्वचित् ।।¹⁷

अर्थात् तभी युधिष्ठिर को कुछ दूर विदुर दिखाई पड़े और युधिष्ठिर उनके पीछे दौड़कर पहुंचे और अपना परिचय दिया कि मैं युधिष्ठिर हूं।

ततः सोऽनिमिषो भूत्वा राजानं तमुदैक्षत ।
संयोज्य विदूरस्तस्मिन् दृष्टिं दृष्ट्या समाहितः ।
विवेश विदुरो धीमान् गात्रैर्गात्राणि चैव हि ।
प्राणान्प्राणेषु च दधदिन्द्रियाणीन्द्रियेषु च ।
स योगबलमास्थाय विवेश नृपतेस्तनुम् ।
विदुरो धर्मराजस्य तेजसा प्रज्वलन्निव ।
विदुरस्य शरीरन्तु तथैव स्तब्धलोचनम् ।
वृक्षाश्रितं तदा राजा ददर्श गतचेतनम् ।।¹⁸

अर्थात् तब अपलक नेत्रों से विदुर ने युधिष्ठिर को देखा और दृष्टि को स्थिर करके युधिष्ठिर के प्राणों में अपने प्राणों को, इन्द्रियों में इन्द्रियों को, शरीर में शरीर को, योगबल से आरोपित करते हुए तेज से मानो प्रज्वलित होते हुए वृक्ष के आश्रित हो गये और युधिष्ठिर ने देखा कि उनका शरीर निष्प्राण हो गया।

धृतराष्ट्र ने भी योगस्थ होकर प्राण विसर्जन किये थे। वन में आग लग गयी थी, संजय ने धृतराष्ट्र को सूचना दी तो धृतराष्ट्र ने स्वयं योगस्थ होकर शरीर त्यागने का निश्चय बताकर संजय को वहां से चले जाने को कहा। इसके बाद प्रस्थान करते हुए संजय ने उनसे कहा :-

‘संजयस्तं’ तथा दृष्ट्वा प्रदक्षिणमथा करोत् ।
उवाच चैनं मेघावी युंक्त्वात्मानमिति प्रभो ।।19

तदनन्तर संजय के चले जाने पर राजा धृतराष्ट्र इन्द्रियों और प्राणों का निग्रह करके योगस्थ हो गये और उनका शरीर काष्ठ के समान हो गया। गान्धारी और माता कुन्ती (पृथा) ने भी वैसा ही किया और शरीर को त्याग दिया।²⁰

कृष्ण के ज्येष्ठ भ्राता बलराम ने भी योगयुक्त होकर ही प्राणों का विसर्जन किया था। इसका संकेत महाभारत के इस पद्य में मिलता है:—

ततो गत्वा केशवस्तं ददर्श रामं वने स्थितमेकं विविक्ते ।
अथापश्यद् योगयुक्तस्य तस्य नागं मुखान्निष्क्रमन्तं महान्तम् ।।²¹

अर्थात्, उसके अनन्तर भगवान् कृष्ण ने एकान्त वन में स्थित उन बलराम को देखा कि वे योगस्थ हैं और उनके मुख से नाग प्राण बाहर निकल रहा है।

भगवान् श्री कृष्ण तो योगिराज थे ही इसे सभी स्वीकार करते हैं। वे योगस्थ होकर शरीर त्याग करें यह स्वाभाविक ही है। व्यास कहते हैं:—

‘मनस्ततः संक्रमणस्य कालं ततश्चकारेन्द्रियसन्निरोधम् ।
स सन्निरुद्धेन्द्रियवाङ् मनस्तु शिश्ये महायोगमुपेत्य कृष्णः ।
जराऽथ तं देशमुपाजगाम.....तदानीं मृगलिप्सुरुग्रः ।।²²

अर्थात्, भगवान् कृष्ण ने अपने प्रस्थान का समय मानकर इन्द्रियों का निरोध किया और इन्द्रियों, वाणी और मन को निरुद्ध करके योगस्थ होकर लेट गये। यह संयोग ही था कि तभी मृग को खोजता हुआ जरा नामक एक उग्र बहेलिया वहां आ गया, और श्रीकृष्ण के पैरों को मृग का मुख समझ कर उस पर बाण चला दिया।

श्री कृष्ण और बलराम के पिता वसुदेव को भी यह सिद्धि प्राप्त थी। महाभारत के अनुसार बलराम और श्रीकृष्ण सहित यादवों का विनाश सुनकर वसुदेव ने भी प्राण त्याग देने का निश्चय कर लिया।

‘श्वो भूतेऽथ ततः सौरिः वसुदेवः प्रतापवान् ।
युक्त्वात्मानं महातेजा जगाम गतिमुत्तमाम् ।।²³

अर्थात् अगले दिन सूर के पुत्र प्रतापी महातेजस्वी वसुदेव योगस्थ होकर उत्तम गति को प्राप्त हो गये।

योगविद्या की यह इच्छामृत्यु साधना गोपनीय मानी जाती रही है, इसीलिए यह साधना कालान्तर में लुप्त हो गयी। इस साधना के एकाध खण्ड अवश्य ही मध्यकालीन हठयोग के ग्रन्थों में बिखरे हुए प्राप्त होते हैं। इसके कुछ उदाहरण द्रष्टव्य हैं:—

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‘उड्डीयाणं त्वसौ बन्धो मृत्युमातङ्गकेसरी।’²⁴

अर्थात्, यह उड्डीयान बन्ध मृत्यु रूपी हाथी को जीतने वाला सिंह है।

हठयोग प्रदीपिका में भी इस तथ्य को इसी रूप में स्वीकार किया गया है।²⁵

पूर्णानन्द यतिकृत तत्त्वचिन्तामणि ग्रन्थ के षट्चक्र विवरण नामक अंश में आज्ञाचक्र का परिचय देकर उसके वैशिष्ट्य का कथन करते हुए कहा है :-

‘इह स्थाने विष्णोरतुलपरमामोदमधुरे।
समारोप्य प्राणं प्रमुदितमनाः प्राणनिधने।
परं नित्यं देवं पुरुषमजमाद्यं त्रिजगताम्।
पुराणं योगीन्द्रः प्रविशति च वेदान्तविदितम्।’²⁶

अर्थात्, यह आज्ञा चक्र अतिशय आनन्दमय विष्णु का स्थान है। इस मधुर स्थान में प्राण विसर्जन काल में प्रसन्न मन होकर प्राणों को स्थापित करके योगी वेदान्त में विदित तीनों लोकों के मूल कारण अज, अनादि, नित्य, परम पुरुष पर ब्रह्म को प्राप्त कर लेता है।

महाभारत महाकाव्य की अंशभूत श्रीमद्भगवद्गीता में भी इसी तथ्य का प्रायः इसी रूप में कथन किया गया है। वहां की शब्दावलि इस प्रकार है:-

‘प्रयाणकाले मनसाऽचलेन भक्त्या युक्तो योगबलेन चैव।
भ्रुवोर्मध्ये प्राणमावेश्य सम्यक् स तं परं पुरुषमुपैति दिव्यम्।’²⁷

अर्थात्, जब मृत्यु काल उचित लगे तब भक्ति पूर्वक अचल मन से योग के बल से प्राणों को दोनों भ्रुवों के मध्य में, आज्ञाचक्र में स्थिर करके योगी उस दिव्य पुरुष परब्रह्म को प्राप्त कर लेता है।

श्रीमद् भागवत् में इस साधना विधि का संक्षेप में किन्तु स्पष्ट विवरण दिया गया है। इसकी चर्चा यथा समय आगे की जायेगी। इस विशिष्ट साधना विधि के अतिरिक्त भी इच्छा मृत्यु अर्थात् मृत्यु को वश में करने की साधनाओं का प्रचलन रहा है, जिसके संकेत सूत्र भी हठयोग के ग्रन्थों में बिखरे हुए मिल जाते हैं, जैसे :-

(1) खेचरी साधना के प्रसंग में घेरण्ड संहिता का कथन है ‘इसकी साधना करने से मूर्च्छा क्षुधा (भूख) तृषा (प्यास) आलस्य, रोग, जरा अर्थात्, वृद्धावस्था और मृत्यु नहीं हुआ करती।’²⁸

युक्त भवदेव ग्रन्थ में भी इसकी पुष्टि प्राप्त होती है।²⁹

घेरण्ड संहिता के अनुसार खेचरी मुद्रा के अतिरिक्त विपरीत करणी—मुद्रा जिसमें दोनों हाथों को समाहित करके उनके मध्य में सिर करके पैर ऊपर किये जाते हैं, और इस क्रिया के माध्यम से सूर्य को ऊपर और चन्द्र को नीचे लाया जाता है, इस का प्रतिदिन अभ्यास करने से साधक मृत्यु को जीत लेता है। स्मरणीय है कि उनके अनुसार नाभि के मूल में सूर्य का निवास है और तालु मूल में चन्द्रमा का। इस कारण ही मनुष्य की मृत्यु होती है। विपरीत करणी मुद्रा (शीर्षासन) द्वारा इसे विपरीत किया जाता है।³⁰

इसी प्रकार घेरण्ड मुनि के अनुसार मातंगिनी मुद्रा भी वृद्धावस्था और मृत्यु को नष्ट करती है। इसकी साधना के लिए शुद्ध जल वाले जलाशय (नदी या सरोवर) में प्रवेश करके कण्ठ की गहराई में खड़ा हो जाये और बारी बारी से दोनों नासिका से जल अन्दर लेकर मुख से बाहर निकालना और मुख से जल लेकर दोनों नासिका छिद्रों से निकालना होता है।³¹

इसी प्रकार भुजंगिनी मुद्रा को भी घेरण्ड मुनि ने जरा मृत्यु विनाशिनी बताया है, जिसमें मुख को कुछ खोलकर कण्ठ से पवन—पान करना होता है।³²

इससे कुछ भिन्न प्रकार से अर्थात् दांतों से दांतों को दबाते हुए और जिह्वा को ऊपर करके पवनपान को भवदेव ने मृत्यु को जीतने वाला कहा है।³³

भवदेव पंचभूत धारणा को भी मृत्यु पर विजय प्राप्त करने का उपाय मानते हैं।³⁴ यह पंचभूत धारणा केवल—कुम्भक साधना प्रारम्भ होने पर सुषुम्ना मार्ग में स्थित मूलाधार स्वाधिष्ठान मणिपूर अनाहत और विशुद्ध चक्र में संकल्प शक्ति से प्राणों को क्रमशः ऊपर ले जाते हुए चित्त की स्थिरता द्वारा की जाती है। यह भी स्मरणीय है कि श्रीमद् भागवत् में एवं भगवद्गीता में संकेतित प्राणायाम, जिसका वर्णन आगे होगा, की साधना का पूर्व अंग पंचभूत धारणा ही है।

उपर्युक्त संकेतों में कितनी सच्चाई है अथवा ये कथन अर्थवादमात्र हैं यह सुदीर्घ परीक्षा का विषय है। यहाँ मैं इतना ही कहना चाहूंगा कि प्राचीन काल में मृत्यु पर विजय प्राप्त करने की अनेक साधनाएं प्रचलित रही हैं, ये संकेत उनके अवशेष मात्र हैं। हमारे वर्णनीय के रूप में अभीष्ट प्राणायाम के कुछ अंगों के संकेत हठयोग के ग्रन्थों में भी उपलब्ध होते हैं। यथा—'वायु को रोककर नाभि से ऊपर के पेट के भाग को अन्दर की ओर तानना उड्डीयान बन्ध है। इससे प्राण ऊर्ध्वगामी होते हैं। इसके फलस्वरूप योगी उसी प्रकार मृत्यु पर विजय प्राप्त कर लेता है, जिस प्रकार सिंह हाथी पर विजय प्राप्त करता है।'³⁵

घेरण्ड संहिता में जालन्धर बन्ध का भी यही फल बताया गया है।³⁶

उड्डीयान बन्ध और जालन्धर बन्ध महामुद्रा के अंग के रूप में किये जाते हैं अथवा इसमें ये दोनों बन्ध स्वतः, लगते हैं, क्योंकि महामुद्रा के लिए 'बाएँ पैर को मोड़कर इस प्रकार रखते हैं कि उसकी एड़ी से गुदा सीवनी पर

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दबाव रहे। फिर दाहिने पैर को सामने इस प्रकार फैलाते हैं कि उससे एड़ी किनारे से दबती रहे और तलवा बायें पैर की जंघा को स्पर्श करता रहे। इसके बाद एक नासिका छिद्र से पूरक करके जालन्धर बन्ध और उड्डीयान बन्ध के साथ कुम्भक करते हुए, माथे को घुटने पर ले आयें और जब तक कुम्भक कर सकें इसी स्थिति में रुकें। महाबन्ध भी इसी प्रकार किया जाता है, अन्तर केवल इतना है कि इसमें एक पैर को गुदा के नीचे न रखकर दूसरे पैर की जंघा पर इस प्रकार रखते हैं कि वह एड़ी नाभि के निकट रहे। महामुद्रा और महाबन्ध दोनों को पैर बदल-बदल कर करते हैं। महामुद्रा में गुदा के नीचे रखे हुए पैर की एड़ी से गुदा पर स्वतः दबाव पड़ता है और मूल बन्ध का कुछ लाभ मिलने लगता है। जबकि महाबन्ध में जंघा के ऊपर रखे हुए पैर की एड़ी से नाभि पर दबाव पड़ता है और उड्डीयान बन्ध के बिना भी उसका आंशिक लाभ साधक को मिलता है। घेरण्ड संहिता के अनुसार दोनों बन्धों के अभ्यास से मृत्यु पर विजय प्राप्त की जा सकती है।³⁷

उपर्युक्त क्रियाओं को मैं पूर्व संकेतित साधना का अंग इसलिए कहना चाहता हूँ क्योंकि उस साधना में प्राणों को भ्रूमध्य (आज्ञा चक्र) में स्थापित करना होता है और इन क्रियाओं द्वारा भी यही होता है अथवा भ्रूमध्य में प्राणों को स्थापित करने में सहायता मिलती है।

इच्छामृत्यु प्राणायाम का संकेत हमें श्रीमद् भगवद्गीता में स्पष्ट प्राप्त होता है। यह संकेत इस प्रकार है :-

**‘प्रयाणकाले मनसाऽचलेन भक्त्या युक्तो योगवलेन चैव।
भ्रुवोर्मध्ये प्राणमावेश्य सम्यक् स तं परं पुरुषमुपैति दिव्यम्।।’³⁸**

अर्थात् मृत्यु के समय अर्थात् देह त्याग की इच्छा होने पर मन को स्थिर करके योग के बल से प्राणों को भ्रूमध्य में स्थिर करके प्राण विसर्जन करने पर योगी उस दिव्य परम पुरुष को प्राप्त करता है।

इसी प्रकार का संकेत षट्चक्र निरूपण ग्रन्थ में भी प्राप्त होता है जिसका उल्लेख पहले किया जा चुका है।

श्रीमद्भागवत् में इस (इच्छामृत्यु) प्राणायाम का संक्षिप्त विवरण इस प्रकार है :-

**‘पाष्यर्थाऽऽपीड्य गुदं प्राणं हृदुरःकण्ठमूर्धसु।
आरोप्य ब्रह्मरन्ध्रेण ब्रह्म नीत्वोत्सृजेत्तनुम्।।’³⁹**

भगवान् श्रीकृष्ण उद्धव से योग साधना की विशेष विधियों और उनसे प्राप्त होने वाली सिद्धियों का परिचय देते हुए कहते हैं कि ‘पैरों को मोड़कर इस प्रकार बैठें कि किसी एक पैर की एड़ी गुदा मार्ग को दबाती रहे (इसके लिए सिद्धासन में बैठना उपयुक्त होगा) उसके बाद प्राणों को ऊपर उठाते हुए क्रमशः हृदय कण्ठ से होते हुए मूर्धा में ले जाएं और ब्रह्मरन्ध्र में ले जाकर शरीर को छोड़ दें, इस प्राणायाम साधना में प्राणों को ऊपर ले जाने के लिए जालन्धर बन्ध और उड्डीयान बन्ध का सर्वाधिक योगदान होता है। इनमें जालन्धर बन्ध का मुख्य योगदान प्राणवायु को मुख और नासारन्ध्र में जाने से रोकना है कि प्राणवायु बाहर न निकल सके। उड्डीयान बन्ध उसे उदर और वक्ष से ऊपर जाने को प्रेरित करता है, ऊपर को ढकेलता है। महामुद्रा और महाबन्ध में पेट पर

दबाव पड़ने से यह कार्य पर्याप्त अंशों में स्वतः होता है। मुख्य कार्य संकल्प द्वारा हुआ करता है। इस संकल्प के प्रसंग में भी इसी प्रकरण में आगे कहा गया है :-

‘यथा संकल्पयेद् बुद्ध्या यथा वा मत्परः पुमान्
..... तथा तत्समुपासते ॥’⁴⁰

अर्थात् साधक ईश्वर को समर्पित होते हुए जैसा संकल्प करता है, वैसा ही सम्पन्न होने लगता है।

इस साधना को रेचक के अन्तर पूरक करके कुम्भक करते हुए योगमुद्रा और महाबन्ध तीनों में अन्यतम से या इनकी समष्टि से प्रारम्भ करना चाहिए तो सुविधा रहती है। इनके साथ प्राणों को ऊर्ध्वगामी करने का संकल्प प्रधान प्रयत्न तो करना ही है। प्रथम स्थिति में ग्रीवा और मुख (चेहरे) के अंगों में वायु भरती हुई प्रतीत होगी और धीरे-धीरे अभ्यास से उड्डीयान बन्ध के द्वारा पेट पर दबाव आने पर प्राणवायु भ्रूमध्य में कपाल में पहुंच रही है, यह अनुभव होने लगेगा। इसके लिए निरन्तर इसका ही अभ्यास अपेक्षित होगा। भ्रूमध्य से ऊपर प्राण वायु के ले जाने का प्रयत्न नहीं करना है। यह साधना ही मृत्यु को दूर रखने की साधना है। इसके अभ्यास के समय प्रायः सभी शारीरिक रोग (बाहरी कारणों से होने वाले नहीं) स्वतः क्रमशः दूर हो जाते हैं।

इच्छा के अनुसार प्राणों को ऊर्ध्वभाग में ले जाने का अभ्यास हो जाने पर योगी जब प्राण विसर्जन करना चाहेगा, तब वह आज्ञाचक्र से भी ऊपर ब्रह्मरन्ध्र में ले जाकर उसमें प्राणों का विसर्जन कर सकेगा। इसी कारण इस प्राणायाम का नाम इच्छामृत्यु प्राणायाम है। इस प्राणायाम का उद्देश्य साधना की पूर्णता होने तक मृत्यु को स्वयं से दूर रखना है। इसी कारण इसके मुख्य अंग उड्डीयान बन्ध आदि को ‘मृत्यु मातंग केसरी’ विशेषण से विभूषित किया गया है। इसकी साधना के परिणाम के रूप में रोगों से मुक्ति और वृद्धावस्था के प्रभाव में न्यूनता को कुछ काल में समझा जा सकता है, वास्तविक परिणाम की प्रतीक्षा तो चिरकाल तक करनी होगी।

ओम् शम्

1. अथ त्रिविधदुःखात्यन्तनिवृत्तिरत्यन्तपुरुषार्थः । सांख्य सूत्र 1.1
2. क्लेशमूलः कर्माशयो दृष्टादृष्टजन्मवेदनीयः । सति मूले तद्विपाको जात्यायुर्भोगाः । योगसूत्र 2 / 12-13
3. विवेकख्यातिरविप्लवाहानोपायः । यो. सू. 2.26 ।
4. यजुर्वेद अ. 36 मन्त्र 24
5. यजुर्वेद अ. 3. मं. 62 ।
6. जीवकर्षभकौ मेदा महामेदा काकोली क्षीरकाकोली मुद्गपर्णी माषपर्णी जीवन्ती मधुकमिति दशमानि जीवनीयानि भवन्ति । चरक-सूत्रस्थान 4.7(1) ।
7. तत्र विडंगतण्डुलचूर्णमाहृत्य यष्टीमधुकमधुयुक्तं यथा बलं शीततोयेनोपयुंजीत शीततोयं चानुपिबेत् एव-महरहर्मासम् । तदेव मधुयुक्तं भल्लातकक्वाथेन वा, मधुद्राक्षाक्वाथयुक्तं वा, मध्वामलकरसाभ्यां वा, गुडीचीक्वाथेन वा, एवमेव पंच प्रयोगाः भवन्ति । जीर्णे घृतवेदनतश्नीयात् । एते खल्वर्शांसि क्षपयन्ति, न्ततो । कृमीन् उपघ्नन्ति, ग्रहणधारणशक्तिं जनयन्ति । मासे च प्रयोगेण वर्षशतं वर्षशतमायुषोऽभिवृद्धिर्भवति । सुश्रुत संहिता चिकित्सा, 27.7 ।

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8. (क) सुश्रुत चिकित्सा, 27.8-28
(ख) अग्नि पुराण, अ. 286.1-24 (यथा-पलाश तैलं कर्षेकं षण्मासं मधुना पिबेत् । दुग्धभोजी पंचशती सहस्रायुर्भवेन्नरः ।। 7 ।।)
9. अज्ञात-श्रीमद्भागवत की भूमिका पृ. 23 से उद्धृत (गीताप्रेस) ।
10. इमं विवस्वते योगं प्रोक्तवानहमव्ययम् ।
विवस्वान्मनवे प्राह मनुर्निष्वाकवेऽब्रवीत् ।
एवं परम्पराप्राप्तमिमं राजर्षयो विदुः ।
स कालेनेह महता योगो नष्टः परन्तप ।। भगवद्गीता 4.1-2
11. महाभारत, भीष्म पर्व 114.81 ।
12. महाभारत, भीष्म पर्व 114.10 ।
13. महाभारत, भीष्म पर्व 114.90 ।
14. महाभारत, शान्ति पर्व 77.1-4 (यशपाल शास्त्री संपादित) ।
ख महाभारत, अनुशासन पर्व 154.2,5 (सातवलेकर (सम्पादित अन्तिम दो) ।
15. महाभारत, द्रोणपर्व 126.21-22 ।
16. महाभारत, आश्रमवासिक पर्व 26.10-11 ।
17. महाभारत, आश्रमवासिक पर्व 26.19-20 ।
18. ततः स नृपतिः दृष्ट्वा वह्निमायान्तमन्तिकम् ।
इदमाह ततः सूतं संजयं जयतां वरः ।
गच्छ संजय यत्राग्निर्न त्वां दहति कर्हिचित् ।।
19. वयमत्राग्निना युक्ता गमिष्यामः । परां गतिम् ।। महा. आश्रम पर्व 26.22-23
20. ऋषिपुत्रो मनीषी सः राजा चक्रेऽस्य तद्वचः ।
सन्निरुध्येन्द्रियग्राममासीत्काष्ठोपमस्तदा ।
गान्धारी च महाभागा जननी च पृथा तव ।। महा. आश्रम 26,21-31
21. महाभारत, मौसल पर्व 4.12-13
22. महाभारत, मौसलपर्व 5.18-19
23. महाभारत, मौसलपर्व 8.15
24. घेरण्ड संहिता 3.10
25. हठयोग प्रदीपिका
26. षट्चक्र निरूपण 6.38
27. श्रीमद्भगवद् गीता 8.10
28. न च मूर्च्छा क्षुधा तृष्णा नैवालस्यं प्रजायते ।
न च रोगो जरा मृत्युर्देव देहः स जायते ।। घेरण्ड संहिता 3.24
29. रसनामूर्ध्वगां कृत्वा क्षणार्धं यस्तु तिष्ठति ।
क्षणेन मुच्यते योगी व्याधिमृत्युजरादिभिः ।
रसनामूर्ध्वगां कृत्वा यश्चन्द्रसलिलं पिबेत् ।
मासमात्रेण योगीन्द्रो मृत्युं जयति निश्चितम् । युक्त भवदेव 1.326-325

30. नाभिमूले वसेत्सूर्यस्तालुमूले च चन्द्रमाः ।
अमृतं ग्रसते सूर्यस्ततो मृत्युवशं नरः ।
ऊर्ध्वं च योजयेत्सूर्यं चन्द्रञ्चाप्यध आनयेत् ।
विपरीतकरणी मुद्रा सर्वतन्त्रेषु गोपिता ॥
भूमौ शिरश्च संस्थाप्य बाहुयुग्मसमाहितः ।
ऊर्ध्वपादः स्थिरो भूत्वा विपरीतकरणी मता ।
मुद्रां च साधयेन्नित्यं जरां मृत्युं च नाशयेत् ॥ घेरण्ड 3.21–32
31. कण्ठमग्नजले स्थित्वा नासाभ्यां जलमाहरेत् ।
मुखान्निर्गमयेत्पश्चात्पुनर्वक्त्रेण चाहरेत् ।
नासाभ्यां निर्गमयेत्पश्चात्कुर्यादेवं पुनः पुनः ॥
मातांगिनी परा मुद्रा जरामृत्युविनाशनी । घेरण्ड सं. 3.67–68
32. वक्त्रं किञ्चित्सुप्रसार्य चानिलं गलया पिबेत्
सा भवेद् भुजगी मुद्रा जरामृत्यु विनाशिनी । वही 3.61
33. दन्तैर्दन्तान्समापीड्य पिबेद्वायुं शनैः शनैः ।
ऊर्ध्वजिह्वा स मेधावी मृत्युं जयति सत्त्वरम् । युक्मभव देव 1.321
34. मेधावी पंचभूतानां धारणां यः समभ्यसेत् ।
शतब्रह्मा मृतेनापि मृत्युस्तस्य न विद्यते ॥ वही 5.143
35. उदरे पश्चिमं तानं नाभेरूर्ध्वं तु कारयेत् ।
उड्डीयानं कुरुते यस्मादविश्रान्तं महाखगः ।
उड्डीयानं त्वसौ बन्धो मृत्युमातंग केसरी ॥ घेरण्ड 3.8
36. कण्ठसंकोचनं कृत्वा चिबुकं हृदये न्यसेत् ।
जालन्धरे कृते बन्धे षोडशाधारन्बन्धनम्
जालन्धरी महामुद्रा मृत्योश्च क्षयकारिणी ॥ वही 3.10
37. महाबन्धमहावेधौ मूलबन्धसमन्वितौ ।
प्रत्यहं कुरुते यस्तु स योगी योगवित्तमः ।
न मृत्युतो भयं तस्य न जरा तस्य बाधते ॥ वही 3.18—20
38. श्रीमद्भगवद् गीता 8.10
39. श्रीमद्भागवत् 11.15–2.6
40. वही, 11.15–26

YOGA THERAPY AND ITS UTILITY FOR SPECIAL CHILDREN

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Key Words: Cerebral Palsy, Down's Syndrome, Spasticity, Mudha, Jada.

ABSTRACT

An All round development of the society has undoubtedly bestowed a handful of boons on the human beings but, at the same time, irregularities of diet and lifestyle, imbalanced ecological conditions have posted many problems before the society out of which one noticed but more suffered problem happens to be having a special child. Special children are characterized by an early onset and impaired movement, posture that leads to perceptual, language problems and intellectual deficits. These are such conditions which affect a child is cerebral palsy, Down's syndrome, Mental Retardation, etc. These conditions occur due to developmental and structural disorder of the brain. According to WHO, incidence of the birth of special children varies from 3.4/1000 live births to 84/1000 live births in different countries of the world. Special children appear with motor, sensory, speech and intellectual problems. The most pitiable part of a special child happens to be its dependency and as such, it not only decreases the social productivity but also increases the social liability, adversely affecting the national progress in the long run on multiple bases. Keeping these views in mind, a pilot study to access the role of yoga for the betterment of such special children was undertaken for 28 days at M.P.I.Y.N.E.R., Gujrat Ayurved University, Jamnagar. The study was done on 2 groups of special children where one group (14 subjects) received only certain Yogic practices and the other group was attributed solely to Physiotherapy (6 subjects). Better results on spasticity (25%) lack of interest (25%) motor-sensory response (15.38%) were found in the Physiotherapy group and good results in spasticity (5.56%), lack of concentration (12.5%), social withdrawal (14.28), lack of interest (20%) were noticed in the yoga group. The full paper contains all the details about the work done which suggests that if judiciously interwoven, Physiotherapy and Yoga Therapy can help such children to lead a better life less dependency.

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Key Words: Cerebral Palsy, Down's Syndrome, Spasticity, Mudha, Jada.

INTRODUCTION

Health is an extent of continuing physical, emotional, mental and social ability to cope with one's environment. Good health is harder to define than bad health because it must convey more positive concept than mere absence of disease or infirmity and there is a variable area between health and disease. A person may be in good physical condition but can have a cold or be mentally ill. Over last many years, there have been vast changes in the technology, thinking process and all over lifestyle of the people¹. This so called 'Advancement' has lead to many serious health hazards up to that extent that sometimes a birth itself may be an everlasting problem for a family and a liability for the whole society, e.g. birth of the kids having Cerebral Palsy, Mental Retardation, Down's syndrome, etc. For easy further reference, such children may be termed as Special Children henceforth. Early onset and impaired movement, posture that leads to perceptual, language problems and intellectual deficits characterize special children.

According to WHO data of the year 2003², incidence of the birth of special children varies from 3.4/1000 live births to 84/1000 live births in different countries of the world. The data further reflects that Pakistan is having the highest number of such cases i.e. 84.3/1000 live births & China and Italy are having the lowest no. of special children i.e. 2.6-3/1000 live births. In U.S.A., incidence is 12/1000 and in India ratio is up to 16.417/1000 live births. These conditions occur due to developmental and structural disorder of the brain.

A special child may have many complications, i.e. motor- sensory deficits, intellectual and perceptual problems, spasticity, etc. These all complications lead to many problems for the whole society. Individuals with these conditions are more likely to be dependent on others throughout their lives. At times, the dependence is extremely burdensome financially and in terms of the quantity of resources. Within the community, a child often requires special housing, transportation, health services, work training, food-clothing subsidies and other support. Continued dependence contributes to negative public attitude towards the child. When so much public money is spent on expensive services for a small percentage of population, a society under economic stress often looks for a scapegoat. It is difficult for the society to handle the special child socially, physically, mentally and financially³.

As the special children appear with multifactorial problems, it is important to treat such a child with multidisciplinary team, as a child is not only physically but also mentally handicapped. In the present scenario, a team may consist of consultants in pediatrics, neurology, ophthalmology, orthopedics, audiologist, psychologist, physiotherapist, special educator and social workers. Excellent progress nevertheless, may be achieved by the cooperation of their parents with the above stated team.

Despite of an involvement and care provided by the team including the specialists and super specialists, till now, no any specific process or therapy may be pointed out which can built up the

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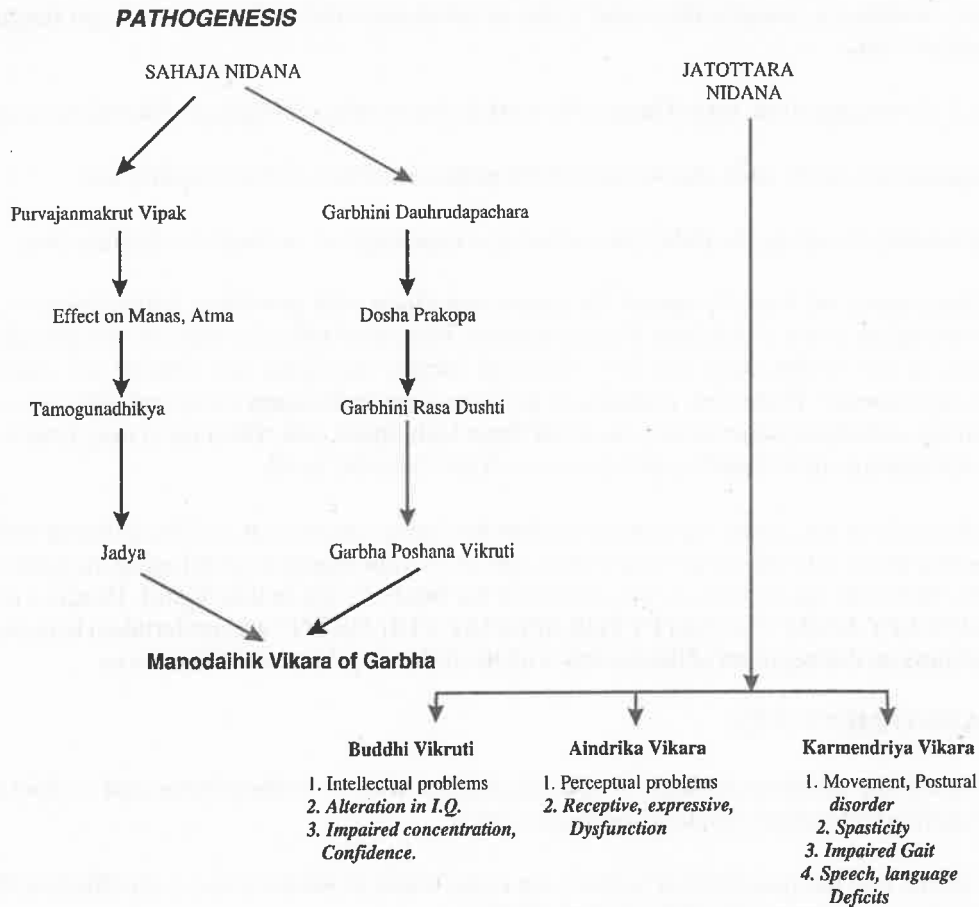
behavioral and intellectual potentiality of a special child. Further, not all medical therapies can provide an overall improvement and they happen to be very much expensive, time consuming and generating dependency. Going to this and looking into alarmingly growing number of the special children, there seems to be an immense need to look for such measures, which would be cost effective, easily adoptable, widely acceptable and effective on various spheres of human existence. There are certain alternatives available for the management of various disorders e.g. traditional sciences like Yoga & Nisargopachara that are getting popularity as less hazardous options for management but they have yet to prove their efficiency on scientific research background in such sectors.

The science of Yoga has been envisaged for an upliftment of the consciousness and intellectual potential of an individual besides being benevolent for the psychophysical plane. In this manner, it may be looked upon as a therapy for the ailing humanity. If all this problem is to be regarded with an eye of an Eastern science, it is essential to understand it in the framework of the available Eastern terminologies. Yoga is not a total medical science and therefore it is required to understand the problem through a science, which has the technical terms similar to the Yogic science, and that science can be none other than the science of Ayurveda where the physiology and pathology of a human body have been dealt with ample details.

According to the texts of Ayurveda, such conditions as special children may be attributed to two terms viz. Jada and Mudha. The etiological factors may be divided into three groups as Sahaja Nidana, Garbhaja Nidana and Jatottara Nidana (including Agantuja Nidana). Acharya Charaka has opined about the etiological factors as per the given table:⁵

Bija-	<i>The genetic trait of the disease and link with chromosomal defect clearly supports the role of bija dusti in causing mental deficiency.</i>
Ashaya-	<i>IUGR, lead poisoning, maternal infections etc. adversely affect the growing brain of the fetus & causes mental defects.</i>
Kala-	<i>It may be taken as the age of Parents when the child is conceived. Mental defects are common both in cases of elderly gravida & early primigravida.</i>
Matru ahara vihara-	<i>It has been seen that children born to mother who drink liquor, smoke etc. may be mentally defected.</i>
Atmakurma-	<i>However, in some, none of these factors support defects still an offspring is affected. This can only be attributed to the result of their sinful deeds in their previous birth.</i>

Besides Acharya Charaka 6, there are some other views expressed by the classics where the other etiological factors have also been stated. The probable pathogenesis of such problems may be depicted as under:



The condition referred here does not happen to be an individual problem but a cluster of problems; hence, not every case may have ideally similar symptoms. Every such case of a special child may report with varying symptoms depending upon the severity of impairment and I.Q. level. However, for easy reference, the list of possible problems, which are usually encountered by such cases, may be listed as under:

SYMPTOMS:

- Spasticity: Increase in the muscle tone due to lesion in Pyramidal tract.
- Alteration in Gait: These changes are due to Spasticity, Impaired motor- sensory functioning, Cerebellum lesion.

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- Alteration in motor- sensory response is due to lesion in motor, sensory pathways and faulty formation of receptive, expressive mechanism.
- Low confidence, social withdrawal is due to developmental and structural hypo functioning of cortical areas.
- Lack of concentration, loss of interest in work is due to delayed Physical, Mental development.
- Dependency can be seen, due to movement, postural and intellectual impairment.
- Dyslexia is a learning disability that occurs due to perceptual and analytic dysfunction.

Due to the potency of Yoga to correct the conscience along with providing better functioning of the body, mind and spirit, it is believed that Yoga can prove to be a cost effective therapy for special children. Yoga therapy is not costly, does not levy financial burden and does not require any sophisticated equipments whatsoever. Therefore, a child can perform yoga techniques independently after an initial careful training and expert supervision. Some of these techniques (viz. Bhramari) may help to develop brain cells and promote brain functions that may reach near 'normal' level.

Today, throughout the globe, various researches are being carried out, on the children with special needs, to further probe into the scopes and dimensions of various therapies in bringing the normalcy back to their lives. However, there seems to be a lacuna in the field of yoga in this regard. Hence, a pilot study "YOGA THERAPY AND ITS UTILITY FOR SPECIAL CHILDREN" was undertaken to access its role and effectiveness on this segment of the society with the following Aims and Objectives.

AIMS AND OBJECTIVES

1. To study the psychopathology of special children with its pathogenesis and symptomatology according to Ayurved, Modern and Yogic views.
2. To probe into the possibilities to chart out some Yogic procedures as a cost effective therapy to improve overall capacity of the special children.
3. To assess the role of Yogic treatment in overall development of the special children.

MATERIAL AND METHODS

The present study comprises of two types of study materials:

1. Conceptual Study: It includes the references regarding the special children compiled from Ayurveda, Yogic and Modern medical science. References collected from different sources such as Internet, libraries (institute library, central library), discussion, etc.
2. Clinical Study: Clinical material comprises of record of the data of investigations carried out on approximately 20 special children for selected yogic procedures.

CRITERIA FOR SELECTION OF THE PATIENTS

The special children reporting at the O.P.D. of M.P.I.Y.N.E.R. and those at the Center for Special Children at Andhajana Vividhlakshi Vidyalaya, Jamnagar were selected for the present study with the consent of their guardian and the concerned child without any bars of cast, creed, religion, financial status, etc.

CRITERIA FOR EXCLUSION OF THE PATIENT

The child suffering from severe mental retardation, severe visual hearing deficits shall be excluded from the study.

CRITERIA FOR ASSESSMENT OF THE RESULTS

- Scale, to make out child's overall development, published by National Mentally Handicapped Institute, Secundrabad.
- Physiotherapy assessment form consisted of:
Muscle: Power, tone.
Joint: Range of Motion
Posture and Gait

PLAN OF THE STUDY:

After selection, the children were randomly divided into two groups, where one group of 14 subjects was subjected to only Yogic Therapy where as the other group of 14 subjects was subjected to the Physiotherapy processes according to their requirements and as a routine activity / management offered by the Center for the Special Children at Andhajan Vividhlakshi Talim Kendra, Jamnagar.

A. YOGIC GROUP:

After assessing the children, selected yogic procedures were explained and they were made to do them and follow it for 1 + 3 weeks under the supervision, in which progression of certain processes every week was done.

Symptom	BT	AT	' t 'value	' p ' value	% of recovery
<i>Spasticity</i>	18	17	1	>0.05	5.56
<i>Impaired gait</i>	28	28	NS	-	0
<i>Independence</i>	17	17	NS	-	0
<i>Lack of Interest</i>	15	12	2.1216	>0.05	20
<i>Lack of Confidence</i>	23	23	NS	-	0
<i>Social withdrawal</i>	7	6	1	>0.05	14.28
<i>Lack of Concentration</i>	16	14	1.5278	>0.05	12.5
<i>Impaired motor / Sensory Response</i>	25	25	NS	-	0

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PLAN OF THE STUDY : YOGA GROUP :

Sr	2nd Week	Min	3rd Week	Min	4th Week	Min
1	Prayer	05	Prayer	05	Prayer	05
2	Relaxation	10	Relaxation	10	Relaxation	10
3	SukshmaVyayama	35	SukshmaVyayama	25	SukshmaVyayama	25
	Rotation-stretches		Rotation-stretches		Rotation-stretches	
	Upper limb-Neck		Upper limb-Neck		Upper limb-Neck	
	Lower limb		Lower limb		Lower limb	
	Twisting		Twisting		Twisting	
4	Suryanamaskara	20	Suryanamaskara	10	Suryanamaskara	10
5	Asana		Asana		Asana	
	Supine		Supine		Supine	
	Crocodiles	10	Crocodiles	05	Uttanpadasana	05
	Steps: 1,2.		Steps: 1,2,3,4.		Pavanmuktasana	
			Uttanpadasana	05	Pavanmuktasana	05
	Prone		Prone		Prone	
			Shalabhasana	05	Shalabhasana	05
			Bhujangasana	05	Bhujangasana	05
					Sarpasana	05
	Sitting		Sitting		Sitting	
	Ardh padmasana	05	Padmasana	05	Padmasana	05
			Janushirasana	05	Yogamudra	05
					Paschimotanasana	05
	Standing		Standing		Standing	
	Katichakrasana	05	Katichakrasana	05	Katichakrasana	05
6	Pranayama		Pranayama		Pranayama	
	*Anulom-viloma	05	*Anulom-viloma	07	*Anulom-viloma	10
	3-5 round		3-5 round		3-5 round	
	*Bhramari	05	*Bhramari	07	*Bhramari	10
7	Aumkara	05	Aumkara	07	Aumkara	10
	Total	105	Total	110	Total	125

B. PHYSIOTHERAPY GROUP:

In this group, physiotherapy treatment⁷ was planned according to the need of child. In the case of a spastic child, stretching, weight bearing exercises, sensory re - education and development exercises were given; where as in the cases with flaccidity, weight bearing and sensory, developmental exercises were given. Only six patients completed the whole schedule of the therapy, hence only they have been included for the counting of the results.

<u>Symptom</u>	BT	AT	't' value	'p' value	% of recovery
<i>Spasticity</i>	8	6	1.6393	>0.05	25
<i>Impaired gait</i>	15	15	NS	-	0
<i>Independence</i>	14	14	NS	-	0
<i>Lack of Interest</i>	4	3	1	>0.05	25
<i>Lack of Confidence</i>	12	12	NS	-	0
<i>Social withdrawal</i>	3	3	NS	-	0
<i>Lack of Concentration</i>	7	7	NS	-	15
<i>Impaired motor / Sensory Response</i>	13	11	1.5822	>0.05	15.38

DISCUSSION:

Group 1: (Yogic Therapy Group)

Spasticity- from the data received, 5.56% relief is found in spasticity. The Sukshma Vyayama, Asana, Pranayama lead to proper vibration of Chakras, tone the muscles and nervous system. Asanas provide stretching of muscle, which inhibits muscle tone and thus provides proper tone of muscles. It regulates all Vayus.

20% relief is found in Lack of interest, 14.28% in Social withdrawal, and 12.5% in Lack of concentration. Due to Pranayama-Bhramari, Anuloma viloma and Meditation- AUM chanting, there is regulation of Satvika, Rajasika Gunas and diminishes Tamo Guna which helps in continuous and uninterrupted awareness of mind. Yogic processes leads to balance in Nadis, which also balance all types of Vayus. Nadi balance, regulate functions of Annamaya, Pranamaya, and Manomaya Koshas. It also stabilizes Mind and steadies the wandering mind.

There was no any difference found in Gait, Independence, Confidence and Motor- sensory responses. This was probably due to the shorter span of the treatment.

Group 2: (Physiotherapy Group)

Spasticity- from the data received, 25% relief is found in Spasticity. Stretching provides inhibition of muscle tone. It works on Golgi Tendon Organ and inhibits alpha motoneurons in the spinal cord and

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allowing the parallel elastic components (the sarcomere) of the muscle to lengthen which helps to relieve stiffness.⁴

15.38% relief is found in Sensory and Motor response, which is due to, selected sensory reeducation and developmental exercises, planned individually according to the condition of child.

Increase in interest by 25%. In Physiotherapy treatment, different colours of physioballs, toys used that are specially designed for Special children. By these joyful activities they won't refuse for treatment and get benefits of sensory reeducation and motor exercises.

There was no any difference found in Gait, Independency, Confidence, Social withdrawal and Concentration. The processes of Physiotherapy also require longer duration to correct the physical problems in such children and above all these processes do not include any processes, which are related with the upliftment of the conscience.

LIMITATIONS:

1. The study duration was small.
2. The study was conducted on Special children but there were no any specific grouping regarding cause of condition, I.Q. wise distribution, etc.
3. The sample size for study was small which affects the over all result..
4. Assessment criteria were limited.

CONCLUSION:

1. Both Yoga and Physiotherapy have proved to be beneficial in special children.
2. According to the present pilot study, Yoga is beneficial for physical and mental aspects of special children & Physiotherapy is better for physical aspects of prognosis.
3. By this study, it may be concluded that, if special children are treated with Physiotherapy and Yoga both, an overall better, early prognosis may be achieved.
4. Yoga is cost effective and does not generate any dependency. Therefore, Yoga specialist should be included in the existing rehabilitation team with other Medical, Para medical etc. specialists.
5. This study has been carried out in a very small extent. Further studies with vaster dimensions have to be carried for bringing out the benevolence of the study.
6. In a period of 28 days, these treatments have shown good observable results.
7. Keeping this view in mind, it may be opined that if these processes were continued for a longer duration, the results would have been far better.
8. Further studies can be done in different groups i.e. Age wise, Cause wise, Condition wise, I.Q. wise, etc.

SUFFERING : A REASON FOR PHILOSOPHISING

Dr. Ishwar V. Basavaraddi*
Dr. N.G. Mahadevappa**

SUFFERING IS A FACT

Man's existence is wholly permeated by suffering is too patent to be denied. What Buddha has said about suffering is worth repeating:

“Now this is the noble truth concerning suffering. Birth is painful, decay is painful, disease is painful, death is painful, union with the unpleasant is painful, painful is the separation from the pleasant and any craving that is unsatisfied, that too is painful” (Foundation of the kingdom of Righteousness).

Even if man's attempt to attain happiness is successful, the very realization that it is not permanent is itself painful. It is true that there are moments of happiness in man's life. For example, he may forget miseries by consuming alcohol or some drug. While he is initially happy by this means, a frequent consumption of it may bind him inextricably to a habit. Once it becomes a habit, it fails in the long run to re-create the earlier intensity of the happiness. For some people even the uninterrupted enjoyment may lead to boredom. It is more often the case that, because of the habit, the subject may lose physical and mental health, thus proving that search for temporary happiness may lead to permanent unhappiness. In other words, the moments of unhappiness are far more and deeper than those of happiness.

The problem of suffering was such an important topic for the ancient Indian philosophers that they have studied it carefully and have classified into three groups (*tāpatraya*) -- (1) *adhibhautika*, (2) *ādhidāivika* and (3) *ādhyatmika*. The evils caused by the physical nature directed neither by man nor God or gods, such as natural calamities, are the examples of the *adhibhautika* evils. The evils sent by the gods are goddesses when they are neglected by their devotees, come under the second group of evils, whereas the evils that are due to man himself (for example gluttony leading to indigestion, uncontrolled consumption of sweets leading to aggravation of diabetes, etc.) are instances of the third kind. All men without exception suffer from one or some or all of these at one time or the other.

Philosophers like *Sāṅkara*, *Nāgarjuna* and Augustine may argue that evil of all kinds is only an illusion, or, at best, a privation, but they should also admit that illusion and privation are themselves an evil.

SUFFERING, A REASON FOR PHILOSOPHISING

It is generally held that suffering is the dominant reason for philosophising in India. Actually the claim means, not that all those who suffer philosophic or are intellectually capable of philosophizing, but that at

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least some men who realize that human existence is inevitably and inextricably associated with suffering begin at some time or other to ask philosophical questions about suffering and existence. These philosophical questions may take such forms as: Whence does man come and where does he go? Is human existence necessary? Is it the result of fortuitous and mechanical combination of some physical, chemical and biological forces, or is it teleological? Why has man to suffer from ignorance and other limitations? Are the miseries sent by some sadistic supernatural agency? Or, are they just the necessary results of the victim's hereditary and environmental conditions, to which he is by chance related? Or, are they the necessary consequence of his own deeds (karma) done in the past? In other words, is man destined to suffer them perennially or is he in some sense free and capable of terminating them irrevocably? If he can, what are the ways and means of overcoming suffering once for all? Thus, while in this West philosophical questions arise from curiosity about and wonder at one's own external surroundings, in India they arise from the awareness of one's own suffering.

Complete freedom from miseries is not attainment of *svarga* (heaven) which is not permanent. Because the duration of man's life in *svarga* is proportionate to the quantity of merit (*punya*) he has acquired in his earthly existence. Once that is exhausted his life in *svarga* comes to an end and he is sent back to the earth where he is set free again to acquire either merit or demerit. Moreover, the denizens of heaven are not free from love and hate, anger and other human defects, which prevent them from enjoying absolute happiness in heaven also.

Complete cessation of suffering and its root cause, ignorance is called *mokṣa* or *mukti* (liberation or freedom). The spiritual discipline, which leads to such a freedom, is called Yoga. Yoga however does not necessarily mean the Yoga which is popularly known, namely, Patanjali's Yoga or Rāja-yoga, but any form of Yoga, such as Bhakti-yoga, Karma-yoga, and so on.

This means that there is a close relation between the awareness of suffering and Yoga, such that man would not be forced to take refuge in Yoga if he were not deeply affected by suffering.

The close relationship between awareness of suffering and Yoga presupposes four important philosophical doctrines (a) the law of *karma* (b) the doctrine of *samsara*, (c) the idea of ignorance as the root cause of all evil and (d) the doctrine of *mokṣa*.

Continue ...

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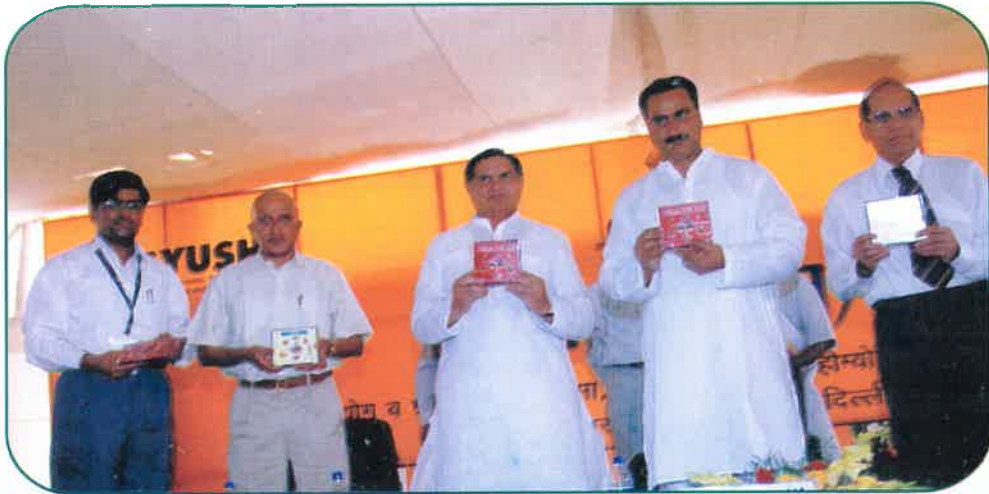
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