

*Therapeutical Importance
of Yoga Practices*

by

DR. M. V. BHOLE, M.B., B.S., M.D.
Deputy Director of Scientific Research,
Lonavla Institute,
INDIA.

Dr. Bhole is a world authority on the Physiological, Psychological Effects and Therapeutic Uses of Yoga. He is Deputy Director of Research at the Lonavla Institute, Poona. His papers are regularly published in Yoga Mimansa, the Institute journal. During the last few years he has visited and lectured in Europe a number of times, making an extensive lecture tour of Britain in 1976.

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Most probably Ayurveda (i.e. Indian system of medicine), Homeopathy, and Yoga consider the man as a whole i.e. with body mind intellect and soul together. The systems of Yoga and Ayurveda have developed hand in hand in India, but with different aims and objects. Preservation of health of the healthy individuals and removal of the sufferings of the diseases were the ideal of Ayurveda while realisation of the absolute nature of the 'self' and to attain a state of 'Samadhi' were the objectives of Yoga. The thought of using yoga techniques in therapy is relatively recent in the field of yoga and therapeutics and it seems that the subject of 'Yoga Therapy' is going to develop in near future. This will require a detailed study of various yoga practices on a different line, because we find that in some schools of yoga, body is slightly overlooked or even neglected to some extent for the higher pursuits of life in the modern sense of the term.

The first question that comes up is, 'what would be the scope of Yoga Therapy'? If we accept the Indian Philosophical classification of human suffering in terms of adhi-daivik and adhyatmik causes (i.e. due to natural, biological and spiritual causes) then we will have to agree that Yoga practices have a place in the treatment of 'adhyatmik' (spiritual) type of human sufferings. This is the claim of most of the Yoga Authorities. According to Ayurvedic theory of diseases, we could say that Yoga practices would be useful in the treatment of diseases arising out of the improper functioning of 'Vata-dosa' or Prana in the body. In modern medical terminology we could put this as 'Psycho Somatic' and 'Functional Disorders'. It is obvious that we cannot think of any yoga practices as specific measures for the fractures, burns, acute viral, bacterial, of parasitic infections, malignant growths etc.

Various types of practices from any school of Yoga could be classified as (A) Preparatory practices to set right the psycho-physical apparatus (B) Higher practices for spiritual experiences. These could be mental or physical. All these practices could be used as therapeutical procedures with proper discrimination.

It is said that the personality is the product of 'Heredity' and 'Environment'. The heredity of an individual is predetermined and hence cannot be changed by any of the yoga practices known to us. The environment is of two types, 'external and internal'. This could be further subdivided into two interdependent entities viz. (a) physico-chemical and (b) mental and emotional. In yoga we are working on these environmental aspects of the personality. For example, selecting proper place and atmosphere, time of the day or the night, particular type of company etc. will gradually bring over a change in the external environment. Change in the diet pattern, practice of asanas, pranayamas, cleansing processes i.e. kriyas etc. will bring about a change in the internal environment, mostly working through the physico-chemical reactions, while recitation of mantras, developing certain attitudes of life

etc. would be working at the mental or emotional level. This will help one to bring about slow, gradual but definite change in one's own personality and thus overcome his sufferings.

In most of the psycho-somatic and functional disorders, the patient suffers because of particular outlook on life. There is a sensory-tonic background within oneself, which is responsible for the individualised pattern of perceptions and reactions to the same stimulus either external or internal. Through various yogic practices this sensory-tonic background and various psycho-neuro-endocrinal mechanisms are directly and indirectly tackled. In this way yoga practices can help to develop better adaptation in the individual, thereby helping one to keep up 'Self-Integration' when exposed to various disturbing factors in day-to-day life. As Hatha-Yoga practices are frequently employed in therapy today, the rest of the discussion is limited to these practices only.

Out of the various Hatha-yoga practices asanas, pranayamic breathing and cleansing processes are mostly used in therapy. An attempt has been made to bring out the principles of pscho-physiological importance with a view to understand the 'modus operandi' of these practices. The most important point seems to be that the body is made to influence mind in these practices. In most of our routine activities it is the mind which is at work constantly and physical activities are the expressions of our thoughts, moods, desires or emotions. So we could say that it is the mind which goes on ordering, guiding and controlling the body most of the time. But in most of the yoga procedures this relationship is reversed.

ASANAS: could be translated as 'Postures' or 'Postural patterns' instead of 'Poses'. They could be broadly classified into three groups viz. (a) Meditative, (b) Relaxative and (c) Cultural or Corrective. Relaxative and cultural asanas are therapeutically more important than the meditative ones. Apart from physical relaxation, they are efficient for mental relaxation also. Relaxative postures have some special advantage over other aids to relaxation like tranquilisers, sedatives, autogenic training and even hypnotic relaxation. In other techniques of relaxation even though the body exhibits profound degree of relaxation, the mind remains active for most of the time and the mental tensions remain suppressed and are never resolved, except in psycho-analysis and psycho-therapy. Not only this, the patient develops dependence on these aids and cannot become independent, except in autogenic training. In yoga, positive effort is made to resolve mental tensions and thus to develop conditions for the mind to relax in the true sense.

Cultural asanas could be employed as physio-therapeutic measures to act on the body or as corrective postures to influence basic personality. Most of the classical cultural postures are different from muscular exercises. The salient features of comparison are listed below.

MUSCULAR EXERCISES:

1. Mostly work through isotonic or isometric contraction of various muscles.
2. As the muscles are constantly at work, the energy expenditure increases, so also the production of waste matter and stress on the heart, lungs, kidneys and other systems of the body.
3. The sympathetic or the adrenergic system is activated, which leads to extroversion, spirit of competition and aggression.
4. Most of these exercises are meant for extremities only while majority of chronic functional disorders centre around visceral organs and brain.
5. They develop bulk of the muscles, which in turn puts more strain on other systems of the body for their energy requirement.
6. They cannot be practised in old age, even if one wants to do so.

CULTURAL POSTURES:

1. Mostly work through stretching of the muscles, while other muscles remain relaxed. Only in some of the asanas there is an element of isometric contraction.
2. Therefore energy expenditure does not increase much and so also the load on the heart, lungs, kidneys and other systems of the body.
3. The parasympathetic or the cholinergic system is stimulated. This leads to introversion, tranquility and a spirit of self-development and inner satisfaction.
4. Most of the asanas work on the vertebral column, autonomic nervous system, visceral organs and the endocrine balance.
5. This helps to bring about the change in the personality.
6. Asanas can be learnt and practised easily, even in advanced age.
7. These asanas keep the muscles elastic and joints flexible.

Thus it will be clear that cultural or corrective postures work on the tonic system in body, which forms the background for all the physical and the mental activities and also the foundation for the sensations and perceptions of the individual.

As physio-therapeutic measures these asanas could be used to develop co-ordination in different groups of muscles, to adjust the tonic disturbances in the body and to work on different joints and ligaments with a view to increase their flexibility and to influence local circulation. Due to pressure changes, that take place in the abdominal cavity during most of the asanas, the visceral circulation and through it various internal functions are influenced. Stimulation of the splanchnic area helps to modify the activity of the autonomic nervous system.

Our emotions and moods are expressed through changes in the tonic background of the body and by resorting to suitable postural and breathing patterns. For example a person with depression, inferiority complex or having a sense of subordination, respect or adoration for the person in front, will assume an attitude of 'flexion' and a condition of 'mild hypotonicity' in certain groups of muscles. On the other hand, a person in anger or agitation, having a sense of superiority, authorisation or thinking

too low of the person in front, would be assuming an attitude of 'extension' and a condition of slight 'hypertonicity' in certain groups of muscles. If these conditions are often repeated or persist over long periods, then related postural and visceral complaints start, for which mere medicines fail to give complete relief. The real cure lies in correcting the basic personality, attitude towards life and towards self. Most of the classical cultural postures work on the vertebral column and if properly selected and practised, they are capable of correcting personality by slowly and gradually working on the sensory-tonic background. In this respect asanas would work in real yogic sense and would be different from other types of exercises.

PRANAYAMA: Yogic breathing though it resembles ordinary deep breathing, is different from it in certain fundamental points. These points could be summarised as under:-

1. It is voluntarily controlled breathing aimed at tackling the higher brain centres, nervous systems and the mind.
2. The air-way resistance to inhalation and exhalation is increased to a varying degree in different types of pranayamas.
3. The phase of exhalation is always prolonged than the phase of inhalation.
4. The lower abdominal and the pelvic muscles are kept in slightly contracted condition through-out breathing, specially during inhalation.
5. Phase of breath-holding, either after inhalation or exhalation, is the most important aspect of this breathing for yogic experiences.
6. A particular ratio has to be established in different phases of breathing viz. inhalation, retention and exhalation.
7. Certain 'Bandhas' or neuro-muscular locks are to be employed during the phase of breath-holding, so also certain 'Gazes'.
8. Mentally one has to perceive the feeling of the touch of air moving in and out of the lungs, in the region of heart and glottis. Mind could also be engaged in reciting certain mantras during this type of breathing.
9. Practising at least ten rounds of such types of breathing two or three times a day is the usual prescription. Hatha-pradipika recommends eighty rounds, four times a day.

Many recent books on yoga state that yogic breathing increases lung ventilation, oxygen consumption and washes carbon dioxide from the body. But laboratory investigations reveal that these claims are not always true. It only misguides the masses and even the yoga teachers referring to these books. Analysis of the yogic breathing will clearly indicate that they are psycho-somatic practices. Their channels of action could be outlined as follows:-

1. Due to increased air-way resistance, the normal pressure changes in the thoracic cavity are augmented and this has beneficial effect on circulation, rather than on gaseous exchange. It has been seen that the cardiac output is increased more in

pranayamic breathing (without retention) than deep breathing, having the same time unit.

2. Prolonged phase of exhalation has a tranquilising effect on the nervous system.
3. Slightly contracted pelvic and abdominal muscles prevent the tendency of congestion in the pelvic region. It also helps to keep the thoracic diaphragm at a higher level, thereby reducing the dead-space volume. This is of special interest for old people.
4. Ten cycles of the same type of breathing help to establish a new rhythm at the higher level, which in turn will influence various psycho-neuro-endocrinal mechanisms and would also be stabilising the mind in the longer run.
5. It has been observed that after about six or seven rounds of pranayamic breathing, the level of carbon-dioxide in the expired air goes on increasing, thereby indicating retention of CO₂ in the body. This could also contribute to the tranquilising effect of Yogic breathing.
6. As the mind is attached to the breathing it becomes calm and quiet, because of slow, smooth and prolonged breathing. One has to realise that there is no expression of any thought, mood or emotion in Yogic breathing. On the other hand, the breathing pattern is allowed to mould the mind accordingly.

Thus one can easily conclude that pranayamic breathing has deeper and higher significance than of mere gaseous exchange. These fundamentals of Yogic breathing could be advantageously used in therapy. Retention of breath after inhalation can excite the nervous system and therefore, its use in nervous or tense persons is not advisable. It will be safe to omit the phases of breath-holding in the beginning of the training of the patient, to prevent possible catastrophes in this field.

'CLEANSING PROCESSES' OR 'KRIYAS':

'Kriyas' of Hatha Yoga have a definite therapeutical value. The 'Kriyas' of Yoga seem to have been developed to prepare oneself for the effective practice of Pranayama, to intensify the events taking place in pranayama and to get rid of some of the side effects of Yogic breathing and Yogic way of life, if at all they tend to appear in the individual. Because of their potentiality to influence in various visceral functions and the endocrinal glands, they assume importance in Yogic therapy.

The Kaivalyadhama Institutions wish to do more scientific and clinical work of fundamental and applied nature in this particular field. But it requires various means and measures to carry out the work. Help from philanthropic individuals, institutions and organisations is humbly solicited by the Director of Research, Kaivalyadhama Samiti, LONAVLA (Poona) Maharashtra state INDIA (410 403).