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REVIEW

Holistic Insight into Health Promotion and Healing in Yoga

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This article is helpful to gain a comprehensive understanding of yoga and the numerous benefits, the practice has to offer. Holistic yoga offers a gentle relaxing form of yoga that doesn't require the participants to be overly flexible. This style generates a rejuvenating effect that leaves practitioner feeling invigorated and in a deeply relaxed state. The aim is to communicate yoga in a traditional form. Practitioner therefore realize the how and why of yoga. This understanding helps to facilitate a deeper and more comprehensive insight into yoga. Holistic yoga provides clear instruction in a step by step approach following all the practitioners to integrate the techniques of yoga investing it in their souls to transform their life into a positive, more fulfilling and happier experience. People would like to try yoga if it is presented in a way that is rational, scientific and most importantly in a style that can relate to which embraces our life style in the 21st century.

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Asana

Ancient classics conceive life as four dimensional entity. Ayu that is living entity is the sum total of physical body, senses, the psyche and the soul. The aim of yoga is to keep the health intact and to cure the diseases of human being. Yoga promotes the four dimensions to remain in most natural or original state. As yoga on one hand, affects the human body promoting the physical health, it also affects senses, the psyche and soul, promoting the mental health on the other hand. Hence the approach of yoga towards health is psychosomatic. There are 8 sub divisions of yoga- yam, niyam, asana, pranayam, pratyahar, dharma, dhyana, samadhi. Although all the 8 subdivisions are health promoting, yet out of them, yam, niyam, asana and pranayama are more imp in this prospect where as pratyahar, dharma, dhyana and samadhi are more of spiritual importance. Yam, niyam, dhyana etc are more concerned to mental health while asana, pranayama are concerned with physical health.

YAM - These are the rules of moral conduct to keep the psyche indulged towards soul. These are five

i.e- ahimsa, satya, asteya, brahmacharya and aparigraha.

NIYAM - are also five-i.e- santosh, tag, swadhyaya, iswar pranidhan.

ASANA - Asana means Systematic assumption of certain postures or positions. Asana are procedure to buttress the effects of other angas of yoga.

It is thought appropriate to consider in brief the effects of kriyas, bandhas, mudras along with asanas.

Asana have psychological bearing. Many asana mimics animals. Many mimics plants. Many mimic nonliving objects. Asana are important for feeling of oneness with the living and nonliving universe. They are important for getting rid of pride and achieving self-effacement.

Asana constitute churning of the whole body so as to get the cream of spirit in terms of self-realization which is a result of awakening of kundalini, when practiced along with yama and other angas of yoga.

Asanas involve co-coordinated, smooth, steady, disciplined contractions and/or relaxations of muscles, systematic squeezing of tissues, stimulations of receptors, alteration in the blood flow, alteration in the characteristics of blood, stimulation of spinal cord and a variety of regions

of brain during neuromuscular activity as a result of receptor stimulation and as a result of stimulation due to altered local metabolism. Asanas are associated with direct stimulation of brain, spinal cord, as well. It is not yet completely understood as to how these simple maneuvers such as compression, stretching, pressing, twisting, distension etc. lead to such profound changes in one human being as a whole, or at least complement or synergies such changes. However effort has been made to probe in these gray areas.

All Asanas cause stimulation of internal and external neural receptors. This causes stimulation of several parts of central nervous system. Asanas cause stimulation of autonomic and peripheral nervous system also.

However quantification of these effects merits attention and extensive investigation. Some Asanas such as sheers asana are associated with change in posture and therefore besides stimulation of receptors it causes hemodynamic changes, displacement of viscera causing local changes which may involve blood flow as well as metabolic changes.

Effects of sheers asana include or may include hemodynamical changes as well as stimulation of receptors in the carotid vessels. Long-term effects of gravitation may include reversal or altered calcification/degeneration in bones.

Asanas such as chakrasana twist the vertebral columns and cause stimulation of nerve roots at different levels. These asanas stimulate local blood flow and prevent congestion, degeneration, fibrosis, osteoporosis etc. in vertebral column and vertebral joints.

Quantification of these effects is however essential. This is because careful evaluation of yogasana effects will enable effective application of yoga in therapy. In this periodic X-rays, range of joint movements, muscle spasms, electromyographic records, measurement of blood flow etc. will prove valuable. Other effects subsequent to these local effects must also be studied.

Pawanmukhasana and kandhansana are the forward and backward extension exercise respectively, which provides almost same effect as that of lumbar traction of physiotherapy. Mats asana stimulates thyroid and parathyroid glands rendering the- basal metabolic rate to natural state. Suptavajrasana

improves the motility at intestine and removes the constipation. Diabetes mellitus can be controlled by activating the pancreas to secrete more insulin with the help of mandukasana.. Varkasana stimulates liver and fat metabolism and is useful in disorder of fat metabolism.

Some asana are useful even to avoid some surgical situations e.g. Gomukhasana is helpful in hydrocele and hernia.

Asanas such as sarvangasana cause compression of thyroid and parathyroid. But the effects must be studied in terms of increase or decrease in hormone levels. Other metabolic parameters such as serum electrolytes, lipid profile, hemogram would also prove valuable. While studying hemodynamic effects one must pay attention towards lower extremities, pelvic viscera, abdominal viscera, lungs, heart and brain.

It must be noted that the effects or benefits of asanas in various disorders are not merely due to mechanical changes resulting from asanas and hence studies involving measurements of change in pressure or such parameters alone are inadequate in assessing the therapeutic utility of asanas.

Asanas such as mayurasana, kukkutasana, vrishchikasana, sheers asana require recruitment of new input and output pathways for regulation of posture. This is likely to give rest to routine pathways active in regulation of posture and establish new synaptic connections in the newly recruited pathways. Assumption of this posture is likely to alter psychological orientation and attention, thus proving beneficial in anxiety states. Studies such as those mentioned earlier must be supported by study of electromagnetic and bioelectric and bioelectromagnetic fields. This is true for all asanas in any case. Moreover these studies must be performed with several permutations and combinations as regards their chronological relationship with each other and interactions.

Asanas such as padmasana are supposed to help an individual collect one's personality. Yoga considers the concrete physical and physiological factors and recognizes their importance in the process of self-realization, because it acknowledges the fact that the cosmic consciousness is in fact in the continuity of physico-physiological processes.

But though this is agreeable on intuitive and subjective grounds, objective evidences must be

searched using high tech procedures to measure nano and pico volts of voltage, along with femto and atto seconds of time involved in many changes.

At the moment N.M.R. computerized axial and positron emission tomography immunocytochemical techniques, kirlian photography etc. are available and must be made use of in the field of yoga.

The concept of 'closing circuit/s of bioelectricity in asanas and mudras must be evaluated. It must be found out, if there is any prevention of entropy or reversal of entropy and if so, to what extent.

Asanas such as chakrasana involve alternate compression and decompression of lungs. These compression and decompression however have to be further studied to understand the manners in which they are likely to influence the health status. Mere measurement of air entry and air exit are not enough for the one may have to study the volley of sensory impulses and motor output.

The asanas may also influence the body processes on the basis of stimulation of acupressure points. This possibility with respect to asanas such as Vajrasana, Padmasana and asanas in general, where unusual parts are pressed, must be explored.

The concept of meridians, the concept of nadis, the concept of bioelectric fields, and the concept of evolutionary transformation in 'frozen' soul must be corroborated.

Some asanas have very obvious mechanical effects. Take for example Pawanmuktasana. In pawanmuktasana benefit of compression and antigravity movement of gases from rectosigmoidal region is utilised.

For the diseases of throat Singh asana is of prime importance.

Mudras and Bandhas

Bandha means tying or closing tightly. This apparently is to close the leakages of the vital or life 'energy'. Actually bandhas are, contracting anal sphincter (mulabandha) or closing tightly the laryngopharynx from oropharynx (jalandharabandha) or contracting abdominal muscles (uddiyana bandha).

It is essential to understand the nature of life force to understand various changes/benefits associated with bandhas. Hath yoga revolves around the

primal force or life force and its sublimation into subtler force of higher consciousness. It is known that this life force does not obey and is independent of the laws of physics. [7] This life force which is named kundalini, and as seen earlier, is associated with germinal epithelium.

It seems this life force associated in the living being with germinal epithelium is not as a coincidence. Actually this life force is responsible for sexual behaviors of would be parents. The life force is responsible for selection of a specific sperm for fertilization with the ovum. This selection of sperm depends on the "SANKALPA" of the life force, and the "purvasanchita" of previous birth. The zygote in this way is a combination of nonrandom choice of sperm with the ovum. This explains the peculiar constitution of the person who is to be born. The person thus born therefore can manifest many phenomena both explainable by genetics because the genetic constitution itself is the result of "SANKALPA" of the life force. This life force it seems is beyond four dimensions, which we tend to understand or believe.

Coming back to bandhas, they cease to remain mere physical or physiological closures or contractions. They seem to influence through, a yet understood connection, the life force.

But this all needs further exploration. The point is that the bandhas assist in channelization of primal force to be sublimated and merged into cosmic consciousness.

The "mudras" are peculiar arrangements of toes, fingers, limbs etc. thus brahmamudra, dronamudra, yonimudra, yogamudra seem to influence the life force similarly.

DRISHTI

While a person is performing asana, he is advised to adopt bhrumadhya drishti (focusing one's eyes on the point between the two eyebrows), nasikagra drishti (focusing eyes on tip nose), or closure of the eyes.

The drishti presumably helps to integrate one's thinking with one's feelings, intuitions, passions etc. At least there is a subjective experience to this effect. This is important because many psychological disturbances are due to lack of such integration. This effect must be studied carefully especially with due attention towards the concurrent neural input in optic nerves, activity of muscles of

eye balls, neural activity in parietal cortex, occipital cortex and other related regions, activity in other body muscles and all other physico-physio-psycho-spiritual concomitants.

Drishti puts in action only the certain muscles of eyeball and lets the others rest. The ones, which are put in action, are usually at rest and vice versa. This allows diversion of mind, from painful or disturbing or distressing issues.

Drishti is associated with calm expressions on the face and relaxation of the related muscles of face. This apparently helps the individual to break the vicious cycle of pain, anxiety causing wry face and/or wry expressions.

Another possible benefit to drishti is synergism between the two cerebral cortices, which probably perform distinctly different but complementary functions, viz. intuitive and intellectual. The drishti apparently helps in differential relaxation of the body muscles, composure of the personality, concentration of the mind. The value of stereopsis is known in this connection.

As far as kriyas are concerned, there are some difficulties in accepting and the conceding of the point of their safety. Ratak, kapalbhati however appear to be safe. However it is essential to avoid them in diseased states involving related organs.

The effect of kapalbhati seems to be in terms of reverting the gravitational effects without gross changes in the posture of the body.

Suryatratak, agnitratak etc. how're must be done only under expert's (with thorough scientific background as well) guidance, in view of effects of U.V. and other radiations. As regards vamanakriya, it may prove useful in cases of what is called ADHMANA, i.e. dyspepsia resulting from distension or hyperacidity. This is because vama may assist the timely relaxation or lower esophageal sphincter in times need.

Kriya such as basti helps if used judiciously and with due precaution in hygiene of bowel, especially in those who have constipation of functional nature. Other kriyas such as involving cleaning of teeth, ears, mouth, tongue, eyes, nose, skin etc. are obviously form important items in the daily routine and must continue to do so.

Pranayama

The process of pranayama involves systematic and disciplined inspiration and expiration with retention of breath or holding of breath in specific proportion and specific manner. The pranayama is divided into a variable number of categories mostly eight. This classification is based on the parts involved and also the manner and intervals in the process of pranayama. The effects of pranayama as claimed in various texts have a very wide range.

Pranayama is apparently a bridge between unconscious and super conscious realms of the individual. The exact nature of this bridge or the exact natural dimensions of this bridge are not known.

Pranayama which is a seemingly bodily process only, actually influences the reticular formation tremendously besides influencing the autonomic nervous system, most parts of central nervous system, neuroendocrine and endocrine systems, immune system and all the metabolic activities in the body.

Pranayama thus encompasses 'close to nonliving' unconscious phenomena as well as 'close to consciousness of cosmic nature' or 'close to super conscious phenomena. Pranayama facilitates probably varying degree of transformation of an individual associated with imbibition's of pranic 'energy'. The ascent of the practitioner probably represents various 'LOKAS' such as swargaloka, Vishnuloka etc.

Nothing has been proved as regards 'SIDDHIS' associated with pranayama. Effects so far observed include some neuromuscular and biochemical effects.

To make a breakthrough in the field of research of effects of pranayama and concepts such as those of Kaluza and Klein[1] have to be studied extensively. This is because concepts of 'compactification' as proposed by modern physics seem to correlate well with concepts of 'kalpa' and kalpanta' also.

The pranayama is associated with a) rhythmic stimulation of stretch receptors, b) rhythmic stimulation of various centers in brainstem, c) rhythmic stimulation of cortical and subcortical centers, d) rhythmic stimulation of or inhibition of various endocrine and metabolic activities in the body. But these effects or mechanisms of effects do

not explain or disprove “SIDDHIS” claimed in pranayama.

Kapalbhati pranayam is helpful in controlling obesity and hypertension. Bharmani pranayam keeps the mind in cool and calm state and hence is very useful for anxiety and depression, except the lumber spondylitis. Ardhamatsendra asanas is also useful in male impotency and erectile dysfunction ,because it improves the circulation and also stimulates testes to produce more sperms.

In charka samhita the great ayurvedic classic, it is stated that sativajaya is the treatment of mental diseases like depression etc. Sativajaya means to control the emotions by controlling the psyche. Charka further said that samadhi is one of treatment of mental diseases.

Pratyahara, Dharana, Dhyana and Samadhi

Pratyahara means withdrawal of senses, dharana means fixation of mind of any object, dhayana means meditation or one pointedness of mind, samadhi means self realization.

The four heading do not seem to represent separate stages however,pratyahara associated with capacity to transcend all material temptation representing ‘cruder energy ‘, dharana associated with focusing of the total being of the supreme reality, and samadhi associated with total sublimation of the individual or total merger of the individual consciousness with cosmic consciousness

The study of these states requires bold and modern concepts, sophisticated gadgetry and dedication to the subject with individual practice and introspection.

Conclusion

This review is a glimpse of YOGA, as can be sensed today. It is clear that it does not confine to today’s scientific knowledge alone or today’s perception of yoga practitioners as found in their writings,[2], [4], [5], [6],[7] or the texts of yoga. [3], [8]. It leaves us at the edge of infinity because YOGA is a process of infinitesimal enlightenment and voyage to the supreme cosmic strength.
Om Nama Iti.

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