Therapeutic Application of Yoga Techniques

☐ Dr. M. V. Bhole

Because of the psycho-physiological nature of yoga techniques they could be employed in the management of psychosomatic diseases and stress disorders. It should be very well remembered that originally yoga was never developed as a system of therapy in the real sense of the term and Ayurveda was dealing with this aspect. Ayurveda and yoga had developed hand-in-hand for years together which only shows their complimentary rather competitive nature and which seems to be the truth.

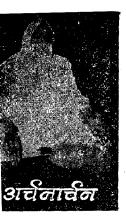
Even though there are many diseases on record, they could be broadly classified as follows for the purpose of yogic therapy.

- 1. Those predominently related with (a) hyper functioning or (b) hypo functioning of the nervous system.
- 2. Those predominently related with (a) emotions and (b) intellect of the individual, and
- 3. Certain types of endocrinal and metabolic disorders. It may be noted that disorders due to nutritional, infections, accidental, organic, structural and ecological factors are out of reach for yoga techniques described so for.

If one will refer to books on yoga therapy recommended for different conditions, certain common factors will come to light. It is intended to refer to these guiding principles behind yogic therapy instead of giving a disease-wise prescription of yoga techniques, even though knowing very well that the latter will be most appealing for any interested person. In fact therapy is an art which requires individualisation and it differs from games, sports and parade programme which can be streamlined for execution with least concern for its practicants.

If one will review various prescriptions of yoga therapy, one will be able to find out certain common factors as detailed below. According to individual case, modifications are made in these factors by different therapists and further modifications are made according to the reactions, responses and feelings of the patients themselves.

आसमस्य तम आतमस्य मन तब हो सके आश्वस्त जन



Guiding Principles of Yoga Therapy

1. Relaxation—Every psychosomatic and functional disorder is an outcome of some stress which results in mental tensions, excessive stimulation or inhibition of the nervous system affecting tone, posture and equilibrium along with disturbances of visceral and endocrinal functions, value system and attitude of the patient to one's life situation.

Therefore, training in physical and mental relaxation is a must for all types of psychosomatic disorders amenable to Yoga therapy. Shavasana and Makarasana are the two important relaxation asanas in vogue to-day.

The important steps to follow and observe are summarised below.

- (i) Most comfortable and suitable position of the body where gravitational influences would be minimum and which will be most conducive to relaxation.
- (ii) To develop an ability to feel tensions operating in different parts
 of the body and to release them by making suitable adjustments
 at gross or subtle level and to learn how the tensions get released
 in the longer run.
- (iii) a. To become aware of one's own breathing in the region of the umbilicus and gradually allow the breathing experience-cum-awareness to spread to thorax and other parts of the body.
 - b. To feel breathing activity in the region of the back which is possible as muscles of the vertebral column relax.

 In due course of time one can experience an expansion of abdomen and thorax in all dimensions during inspiration and reduction in the size of these cavities from all directions during expiration.
 - c. With some practice one can feel inflation and deflation all over the body which is synchronous with breathing.
- (iv) To feel the touch of air within the nostrils and to remain aware of the same and even get guided by these sensations within the body. These could be either warmth and cold, touch, pressure, volume changes or flows.
- (v) To observe various thoughts and/or thought processes coming to one's own mind in a passive manner to learn not to supress them nor to get involved and lost in them.
- (vi) To change the awareness from i to v given above in a cyclic way or in a randomised fashion taking care not to fall asleep, but to remain awake.

Therapeutic Applications of Yoga Techniques / 293

With some practice one will be able to relax in other positions of the body also. In advanced stages patients would be made to bring back to memory various associations related to different parts of the body and to work out the causes for those associations. This should be done cautiously even by an experienced therapist knowing the repurcussions of activating associated memories and thoughts and that too, only after dealing with one-self with some success.

Asanas for Tackling and Correcting Postural Substrate

2. Most of the cultural asanas described in different books could be used to tackle and correct the postural substrate of the individual and thus bring about a change at the psychological level through pro-prioceptive feed back. The theme as been presented in Fig. 1.

Breathing in Asanas to Tackle Muscle Tone and Functioning of the Nervous System

3. If the muscles of the body are hypotonic, then it is better to ask the patient to practice asanas after deep inhalation and holding the breath inside during the maintenance of asana.

On the other hand if the muscles are hypertonic, then it is advantageous to exhale and hold the breath out during the practice of asanas. As one can not hold the breath for a long time, one could have a number of breaths with breath holding, either after inspiration or expiration, as the case may be.

In normal conditions one could continue with natural breathing in every asana.

Sequential Practices

4. Sequential practices like Surya-namaskaras have been found to be useful for those patients who have obsessions and fixations. Changing asanas one after the other will help to break the tendency of the mind to remain fixed to one thing. This will work if the individual could remain aware of what one is doing and what is happening during any sequential technique.

Condition of the Eyes

5. If the patient shows tendency to go within, then keeping the eyes open during the whole session of yoga practices proves useful. On the other hand if one feels that the mind of the patient wonders out-side the body, then keeping the eyes closed and feeling of the touch of air within the nostrils proves beneficial.





Cleansing Processes (Kriyas)

6. Cleansing processes (Kriyas) are very important in the treatment of many functional disorders. It should be remembered that these kriyas have direct influence on the autonomic nervous system and attitude and value system of the patient. The effect of these techniques could be slow in onset in many cases but when it starts, the results are marvellous. Kriyas are expected to influence endocrines and metabolic pathways in a subtler manner.

Pranayama

7. Pranayama is very useful tool in yogic therapy provided one can really go to the level of pranic activity in the body. Otherwise, most of us remain on the level of learning to manipulate breathing only. Even this has tremendous benefits as the whole function of the brain (both voluntary and involuntary) gets modified. Regularised systematic breathing helps one to regularise various physiological and psychological functions in due course of time.

As referred above, individual considerations become important even though one can easily start with Anuloma-Viloma and Ujjayi Pranayama with advantage and without the fear of any unwanted side reactions. Other types of pranayamas can also be learned and utilised according to individual reactions, responses and feelings.

It is advisable and rewarding to refrain from breath-holding (technically called as Kumbhaka) in the initial period. In the light of inner feelings one can gradually progress with Antar-Kumbhaka or Bahya-Kumbhaka as the case may be.

Individuals with agitated nervous system or weak nerves will get benefited by 'Rechaka Pranayama' while those with inhibitions will be helped through 'Antar-Kumbhaka' in Pranayama.

A session of suitable cleansing processes (Kriyas) before pranayama has been seen to give better results.

In the same way a session of asanas ending in a good practice of Shavasana (i. e. relaxation after release of tensions) will prove of immense help before switching over to pranayama.

Dietary Moderations and Modifications

8. Dietary moderations and modifications are useful and essential in most of the conditions. Ayurveda mentions that with proper diet, no disease will arise and without the observation of dietary conside-

Therapeutic Applications of Yoga Techniques / 295

rations no medicine will work effectively. The same holds good for yoga techniques too.

Mental Tensions and Meditation

Through pranayamas and asanas one is expected to develop some inner experiences while the tensions manifesting at the gross level are being tackled and released. At this stage one can become aware of the mental tensions and conficts etc. If the individual gets proper guidance. This can create a turbulance in the individual because there is something like confrontation taking place within oneself and the individual could become hyper-sensitive for some period. We could call this as the most critical phase or period in yogic therapy of psycho-somatic disorders. Very often people do not reach this state as they remain on the physical aspects of asanas and some breathing manipulations under the name of pranayama. But if an individual could come upto this level, and if one has a good yoga teacher-cum-therapist, then the possibility of getting a permanent cure for ones suffering is in the foreground. One has to continue with one's practices. But now the nature of practices has to change and one has to switch over to medicational techniques.

Going into Meditative or Reflective Mood

10. Going into meditative or reflective mood will unfold the causes or causative factors of one's own sufferings and one way then be inspired to change one's life style, value system and attitude to life situations in order to remain contended, healthy, happy and satisfied. At this stage one realises the importance of Yamas and Niyamas as advocated for a yoga practicant in comparison to the similar precepts and practices emphasised for good social and moral behaviour in the educational system. The former is developed from within while the latter is imposed from outside.

Some Important Psycho-Somatic Disorders and Suggested Plan of Vogic Therapy

11. (i) Hypertension: Relaxation is the basic practice. Recognising the source of tensions and releasing them can give permanant relief. Most of the time one tries to block the tensions from being manifested in the form of high B. P. Therefore, even though B. P. gives normal or low values, the tensions are still operating. If one realises this fact; one will be able to appreciate the importance of yogic approach which requires long journey rather than a short cut.

Dietary reformations are already emphasised. Other asanas and Pranayamas are useful as tonics.

आसमस्य तर आत्मस्य मन तब हो सते आश्वस्त जन



Dr. Datey and Dr. Chandra Patel have established the utility of relaxation in the management of hypertension through their clinical work.

(Ref.: 1. Datey, K. K. et al Shavasana, Yogic exercise in the management of hypertension. Angilogy 20, 325, 1969).

(ii) Rehabilitation after heart attack and Myocardial infraction:
Relaxation, changing one's attitudes to life situations, practice of asanas based on the principle of 'exercise without exertion' and taking to pranayama as a technique to understand and manipulate the functioning of the involuntary nervous system could be practised with advantage after heart attack and by patients with myocardial infraction and ischaemic heart disease.

Work of Dr. Tulpule has shown significant results in this area. (Ref. 1. Tulpule, T. H., and Tulpule, A. T.—Yoga a method of relaxation for rehabilitation after myocardial infraction, Ind. Heart Journal, 32: 1980).

- 2. Tulpule, T. H. et. al.—Yogic exercises in the management of ischaemic heart disease, Ind. Heart Journal, 23:4:1971,)
- (iii) Bronchial Asthma—The treatment could be started with suitable cleansing processes like neti, dhauti, kapalabhati, shankhaprakshalana, agnisara during attack free condition. This should be coupled with pranayama, relaxation and corrective asanas. Infections etc. should be treated by suitable medicaments. If the attack has set-in, then it is advisable to switch over to medicines.

Work of Dr. Bhole and others at Kaivalyadhama, Lonavla have proved the efficacy of yogic techniques in the management of bronchial asthma.

(Ref. Bhole, M. V. et al.—Rationale of Treatment and rahabilitation of asthmatics by yogic methods, Collected Papers on Yoga published by Kaivalyadhama, Lonavla, 1975. Bhole, M, V. et al.—Various scientific articles on this subject published in Yoga Mimamsa, Vol. 20, No. 3 & 4).

(iv) Diabetes—Obese type of patients can very well start with different asanas, cleansing processes, bhastrika and relaxation. While lean and thin type of patients should start with relaxation and pranayama. They should practice asanas in a very relaxed manner.

Works by Drs. T. H. Tulpule, Divekar, and Mahmood in this field are encouraging.

- (Ref. 1. Tulpule, T. H.—Yogic exercises and diabetes mellitus, Madhumeha—Jour. of Diab. Asso. India, Vol., 17, April, 1977.)
- 2. Mehmood, U.—Yoga and Diabetes, Department of Medicine and Diabetology, Govt. Stanley Hospital, Madras. (Personal communication).
- 3. Divekar, M. V. and Mulla, A. T.—Effect of Yoga therapy in Diabetes and obsesity. *Clinical Diabetes update*—1981. Published by Diabetic Association of India.
- (v) Constipation—Drinking lukewarm water with salt (0.9% saline) till the stomach is moderately full before starting asanas and to continue drinking a glass or half-a-glass of luke-warm salt water will help to stimulate peristaltic action in the intestines and colon. In the beginning, one may not get a motion immediately after the session of asanas. Gradually this period will start coming nearer to the asana session and afterwards one could get a motion even before the session. One will have to continue with it till the old habit is broken and new habit is established.

Other practices will have its importance.

The work by Swami Kuvalayananda on the influence of Yoga techniques on the position of colon and colon contents is important in this regard.

- (Ref. 1. Kuvalayananda—Basti or Yogic flushing of the colon; Cecal constipation, position of colon during Nauli; Distribution of colon contents during Nauli—All articles published in Yoga Mimamsa Vol. I to III: 1924-26).
- 2. Parandekar, M.M.—Constipation—Its causes and cure. Yoga Mimamsa. Vol. IV, 1933.
- (vi) Sinusitis, Headaches: The main practices for this trouble are neti kriya of various kinds; Kapalabhati and Anuloma-Viloma Pranayama. The work of Kaivalyadhama Yogic Health Centre at Bombay has shown that this trouble could be tackled very effectively through Yoga education.
 - (Ref. Bhole, M.V.—Yogic Treatment of Chronic Rhinitis and Sinusitis, Maharashtra Medical Jour. Vol. 17, No. 8, 1970).
- (vii) Hyperacidity and Bilicusness: One could very well start with dhoutis, and switch over to relaxation and meditation to work-out with the tensions which could be very deep-seated indeed.

आसमस्य तम आत्मस्य मन तब हो सके अश्वस्त जन



In case of emergency like getting a heart burn or an inability to go to sleep due to stomach disturbance, it is advisable to practice vamana dhauti even after a full meal (technically called as 'Bhagi') till one gets relief. This practice will only remove excess of acid from the stomach. It may not correct the secretory pattern of the stomach glands for which other practices will be useful.

The work of Dr. S. L. Vinekar in the psycho-physiotherapy unit of K.E.M. Hospital, Bombay in collaboration with Dr. Wahia and others had given positive results in their first clinical trial with laboratory investigations. Patients of peptic ulcers had also shown improvement.

- (viii) Cervical Spondylitis: Apart from training in relaxation; Brahma Mudra; Jivha Bandha and Simha Mudra have been found to be very effective in tackling this condition. Vakrasana in supine condition and asanas working on the lumber region are also useful.
 - (ix) Slip Disc: Bhujangasna, Shalabhasana, Dhanurasana are the main asanas along with relaxation. Even though forward bending asanas like Paschimottanasana are contra-indicated, it could be done with advantage under the guidance of an expert knowing the difference between asanas and exercises. As the asanas are invariably practised as exercises; it is better to avoid forward bending asanas as a rule of the thumb.
 - (x) Obesity: Apart from cleansing processes, Bhastrika Pranayama and asanas to increase overall metabolism and induce some corrective mechanisms in the body, relaxation and meditational practices aiming at increasing the level and intensity of satisfaction arising from within has more lasting effect on the control of this problem.

Works of Drs. M. L. Gharote and Divekar give enough evidence in this regard.

- (Ref. 1. Gharote, M. L.—An evaluation of the effects of Yogic Treatment on Obesity -A Report, Yoga Mimamsa, Vol. 19, 1: 1977).
- 2. Divekar, M. V. and Mulla, A. T.—Effect of Yogic Therapy in diabetes and Obesity—Clinical Diabetes update, 1981.
- (xi) Rehumatic Arthritis: Various asanas working on the affected joints and other joints of the body should be done in a progressive manner i.e. from simple to difficult and stress should be

Therapeutic Applications of Yoga Techniques / 299

given on maintaining the position in a relaxed manner for some time where one feels some stretching and bearable pain.

The acute conditions, however, one should resort to medical treatment.

Cleansing processes will have immense utility but they will take some time to show their effect.

Dr. Marwah's work on Yoga and collagen tissue disorders at Medical College Hospital, Nagpur has given encouraging results in this respect, (Personal communication).

(xii) Psychological Condition: In depression various sequential practices during inhalation or breath holding after inhalation; cleansing processes and suitable asanas to correct postural substrate should be gone through under the guidance of the Yoga therapist.

In agitational states, on the other hand, relaxation, Anuloma-Viloma and Ujjayi and cleansing processes with suitable corrective asanas should prove useful if practised under proper guidance.

Some work on cases of neurosis and ASQ and NSQ studies by workers like Dr. Bhole et al. are good pointers in this field.

- (Ref. 1. Bhole, M. V.—Viscero-emotional training and re-education through asanas, *Yoga Mimamsa*, Vol. 19, 1-3, 44-51, 1977-78).
- 2. Oak. J. P., and Bhole, M. V.—ASQ and NSQ studies in asthmatics—Yaga Mimamsa, Vol. 20, No. 3 & 4, 1981.
- 3, Idem—Direction of change in value system in asthmatics, *Ibid.* Vol. 20, Nos. 3 & 4, 1981.)
- (xii) Pregnancy: In fact pregnancy is not at all a disease, still then now-a-days people want some special guidance for it. Yoga practices should suit the nature of various psycho-physiological changes taking place during pregnancy.

In the first trimester (1st to 3rd month) routine of simple as an as with breathing could be continued without jerks. If there is nausea and vomiting, vaman dhauti of a mild type could be practiced.

In second trimester (4th to 6th months) mild Uddiyana; mild agnisara, pranayamic breathing and relaxation could prove useful along with simple asanas.

आसमस्य त्रव आत्मस्य मन तब हो सके आश्वस्त जन



In third trimester (7th to 9th months) very mild Uddiyana, Pranayama without Kumbhaka and awareness of one's breathing with simple asanas involving leg movements will be useful.

(xiv) After delivery: One can start with Aswini mudra for assisting the process of involution; Uddiyana mudra and awareness of breathing would prove useful along with simple asanas of different nature.

Apart from instructions from the yoga teacher, one's own inner feelings and responses should also be taken into consideration to finalise the nature of yogic treatment programme by the patient.

- (xv) For Children—To Increase Height: Almost all the cultural postures help to increase height. Dr. K. V. Panse from Poona is routinely treating such cases through suitable diet and yoga practices.
- (xvi) Cerebral Palsy: Children have shown good response to sequential type of yogasana in a study by Mr. M. G. Mokashi at the All India Institute of Physical Medicine and Rehabilitation, Bombay.

(Ref. Mokashi, M. G.—Yogasanas as key postures in Cerebral Palsy, Jour. Ind. Asso. of Physiotherapists, 1974).

- (xvii) Old Age Problems: It could be tackled by suitable yoga techniques. Dr. Tulpule, et. al. are working in this area in Bombay after their studies on the effects of Yogic exercises on middle aged men.
 - (Ref. Gogate, A. N. and Tulpule, T. H.—Cardio-respiratory, metabolic and harmonal changes in middle aged men following yogic exercises. *Maharashtra Medical Jour.*, Vol. 25, No. 6, Nov. 1978).
- (xviii) Physical Fitness: Minimum muscular fitness and autonomic balance in school going children was seen to improve significantly through Yoga training programme.
 - (Ref. Gharote, M. L.—Effect of Yogic training Physical Fitness. Yoga Mimamsa, Vol. XV, No. 4; 31-35, 1973.)
- (xix) Cholesterol Problem: There are number of reports about the beneficial influence of Yoga practices on blood cholesterol which is creating lot of health problems today.

It is not intended to give a long list of diseases which can be treated through suitable yoga techniques but the examples with references cited above

Therapeutic Application of Yoga Techniques / 301

should be able to convince an enquiring mind about the efficacy and utility of these techniques in the management of various functional disorders of psycho-somatic nature. Clinical work is in progress in various medical and yogic centres in and out of India. Some of the important source material is as follows;

- 1. Bihar School of Yoga, Monghyr—Management of Asthma, Hypertension, Obesity and Diabetes by Yoga.
- 2. K. N. Udupa—Yoga and Stress Disorders—Banaras Hindu University, Varanasi.
- 3. Kuvalayananda and Vinekar—Yogic Therapy: its basic Principles and Methods—Central Health Education Bureau, Ministry of Health, New Delhi.
- 4. Bhole, M. V.—Yoga and Promotion of Primary Health Care, Yoga Mimamsa, 22, 1983.

—Joint Director of Research, Kaivalyadhama S. M. Y. M. Samiti, (Distt. Pune)—410 403. Lonavla

आसमस्य तम आत्मम्य मम तब हो सके आश्वस्त जम