

# Health Status of Nurses and Yoga

## III : Yoga Package

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### Abstract

This is the third and the concluding part in the series of articles on 'Effect of Yoga on the Health of Nurses', an experimental study. It outlines yoga package administered to sample of nurses who were found to have health problems. This treatment package was selected after reviewing yoga being advocated by various yoga centres in the country, particularly at Chandigarh. The treatment method is simple, learned easily and practised safely, unsupervised at home. Effect of this yoga treatment shall be reported in the coming issues.

### Introduction

Yoga is a system by which a person could enhance his physical and mental abilities so that he could develop a deeper insight into the meaning of existence. It is mainly meant for spiritual aspirant but common man can also benefit from it. The first written treatise on yoga i.e. the Patanjali Yog Sutra dates back to 5 B.C. The eight steps of Patanjali Yoga are as follows :

1. Yama : Rules of morality such as nonstealing, noncoveting, truthfulness, non-violence.
2. Niyama : Rules of self discipline such as purity, austerity, study of scriptures, continence.
3. Asana : Postural patterns.
4. Pranayama : Regulated breathing.
5. Pratyahar, withdrawal of senses from external objects.
6. Dhrana : Effortful concentration.
7. Dhyana : Spontaneous concentration.

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8. Samadhi : State of superconsciousness in which there is oneness with object of concentration.

Yama and Niyama guide the passions and emotions and keep man in harmony with others in society. Asanas keep body healthy and strong. Pranayama stills the restless mind. These are the outer quests of yoga. Pratyahar, Dharana, Dhyana and Samadhi constitute the 'inner' yoga. These keep man in harmony with himself and his creator.

In addition to these steps, texts of 'Health Yoga' describe kriyas or internal cleaning processes and yogic concept of diet. These are also considered essential for good health.

However, the methods of yoga therapy to treat ill health are not standardized. The practices by different yoga centres are not uniform. Different approaches to yoga treatment are based on personal experience of yoga teachers. Keeping all these limitations in mind, it became difficult to select the most appropriate method of yoga treatment for the present study. Finally, the methods as being taught at Chandigarh Yoga Sabha were selected for various reasons. This is one of branches of 40 well established yoga centres operating in the country since 1930's under the guidance of Swami Devi Dayalji. Pilot survey showed that treatment was being carried for a large number of psychiatric, psychosomatic and physical diseases. Secondly, controlled clinical research is being conducted using these methods at Nehru Hospital, P.G.I.M.-E.R. since 1981. It was found useful for various psychosomatic and psychiatric disorders e.g. nasobronchial allergy (Kaushal et al. 1988), chronic refractory psychoveniosis (Grover, Varma, Pershad, Verma 1988) and psychogenic headache (Prabhakar, Chopra and Verma, 1988, ICMR study). Significant improvement was also observed in emotional stress and conflicts. Lastly, an important consideration which was kept in mind while selecting this approach was that it seemed appropriate for use in the general hospital getting patients who are not highly motivated to learn yoga but want relief from the illness in shortest simplest manner. As the treatment method is simple, the techniques can be learnt very easily and practised safely, unsupervised, at home. As the practices have been simplified, there is no risk of adverse ill effects arising due to the incorrect home practice. It has been reported that patients reported no difficulties in maintaining this regular simplified practice of yoga. However, subjects who were taught the more difficult practice requiring greater psychological sophistication and attention, reported



difficulties in home practice (Grover, 1986). As a result, this was discontinued.

Thus, a treatment approach was needed which is simple, safe and economical in terms of time and effort required. It was with all these considerations in mind that the yoga treatment approach as taught at Chandigarh Yoga Sabha was taken for evaluation in the present study.

### Yoga Package

The treatment was based on Hath Yoga techniques which have been adapted for therapeutic use. It comprised the following (Devidayalji, 1965, 1971, 1980, 1982, 1984).

- (a) Kriyas or cleaning processes
- (b) Asanas or postural patterns
- (c) Pranayama or regulated breathing.

#### 1. Kriyas or cleaning processes

Six kriyas which were taught to the nurses were as follows :

(i) *Ghr̥it̥ neti* : One teaspoon of warm ghee is put in each nostril while the patient lies on her back.

(ii) *Sutra neti* : Sutra neti is a specially designed string about twelve inches long and tenth inch in diameter made of cotton thread.

**Procedure :** The *neti* is soaked in tap water for about 5-10 minutes to make it harder. Keeping the *neti* stiff and straight, it is made to enter and move upwards in one of the nostrils, well held and operated with the help of thumb and the two adjoining fingers of the two hands. Very soon, it strikes in the throat. Now it is held with the right thumb and two fingers very gently pulled out through the mouth, adequately supported by the other hand. It is taken out slowly through the mouth.

Some patients experience difficulty, in performing the *Sutra Neti Kriya*. In order to facilitate learning *neti* made of rubber (rubber catheter) is used initially. As it is softer and more pliable than the *Sutra neti*, it is passed through the nasopharyngeal tract easily without creating excessive irritation. Once a person is able to do the *rubber neti*, then the *sutra neti* can be done with relative ease.

(iii) *Jal Kriya* : **Procedure :** The specially prepared nozzle fitted with tinned brass vessel is filled with warm filtered, clean, saline water. One small teaspoon of common salt is mixed in 1/2 litre of water. While squatting, the spine is kept erect and vessel is held in the right hand. Now tilting the head a little towards left, the nozzle is fixed in the right nostril, raising the vessel to an adequate height. The water flows of its own and passes through the other nostril, flushing and cleaning the whole of the system. The procedure is reversed so that a regulated stream of water flows through the left nostril and comes out of the right. In this manner nearly half litre of water should be passed from both the sides.

(iv) *Jal Paan* : This involves drinking water through two nostrils. *Sutra neti* clears the nasal passages and *Jal Neti* washes to free them of all dirt and germs. It is after this that milk or water can be taken through the nostrils. **Procedure :** To start, sit in the crow pose. Warm saline water (as described in *Jal Kriya*) is taken in the '*neti pot*.' The nozzle is inserted in one of the nostrils with vessel held in the corresponding hand, tilting the head a little backward. Now the vessel is raised and tilted carefully regulating the flow of water to avoid coughing. Draughts are in the stomach as in normal drinking. Mouth is kept open for a low breathing. After half the water has been taken, the rest of it should be taken through the other nostril.

(v) *Dugdh Poan* : **Procedure :** The procedure for this is the same as for *Jal Paan* as described above. Instead of water, lukewarm milk is taken through the nostrils. Milk is processed differently according to the season.

(vi) *Brahmdatan or Kunjal Kriya* : Using lukewarm water, the *Kriya* is performed as follows :

**Procedure :** In a squatting position, water is drunk rapidly without pausing till there is a desire to vomit. After this, with left fist pressure is put on the navel and the two fingers of the right hand are inserted in the back of the throat to induce vomiting. The fingers of the right hand are repeatedly made to touch the back of the throat till most of the water has been vomitted out. At the end of this exercise, the person lies down in *Shavasana* and covers the body with a thin blanket. He rests like this for five to ten minutes.

**Diet :** The night before the *kriya* is performed and after doing the *Kriya* light meals have to be taken i.e. milk or porridge made from rice and pulses.

**Frequency :** This *kriya* was performed once in two weeks by patients with dyspepsia.

2. *Asanas* : The *asanas* are performed in a relaxed manner, without straining, to the optimum capacity. They are followed by a short pause in *Shavasana* or *Makrasana* before going to the next *asana*.

Jeevan Tatwa has seven exercises. These are as follows :

(i) (a) *Naadi.taan* : **Procedure :** Lying flat on the ground the two arms are together. The fingers of the two hands are interlocked with palms facing the feet. Slowly raise the arms upwards and then backwards till they touch the ground. The feet are joined and stretched backwards as well. The arms are kept fully stretched. During the circular movement of the arms, a slow deep breath is taken. As the arms touch the ground, the breath is retained. Now the breath is released gradually and arms returned in reverse to reach the position of start. Frequency was thrice with-out pause.

(b) *Shushka-nauli* : **Procedure :** The spine is kept erect while sitting crosslegged on the ground. The right shoulder is moved in a circle after raising it towards the ear. The similar rotatory motion is given to the other shoulder also. Then simultaneous and



alternate movements are given to both the shoulders.

**Duration :** One to two minutes, preformed continuously without a pause.

**Pagchalan :** Procedure : Lying flat on the ground, one foot is placed over the other. Now the body is turned sideways till the toes touch the ground. the two arms rest on the two sides. This movement is repeated with the other foot on top.

**Frequency :** Performed continuously eight to ten times with each foot.

(d) **Nabhi-chalan :** Procedure : Lying flat on the ground, the two arms are placed on the sides. The two feet are joined and moved sideways. The abdomen alongwith the lower half of the body also turns.

**Frequency :** Done continuously eight to ten times without pause.

(e) **Antar-chalan :** Procedure : Lying flat on the ground, the right heel is pressed against the root of the left thigh. Pressing hard against the thigh, the knee is made to touch the ground. Then the leg is stretched quickly. This is repeated with the other leg.

**Frequency :** Three times, done continuously without rest pause.

(f) **Naadi sanchalan :** Procedure : While sitting erect on the ground the two legs are stretched apart sufficiently, about a meter. Now the toes are held with the two hands, then move the hands side ways in a circle touching the alternate toes i.e. right toe

**Frequency :** Ten to fifteen times, done continuously without a rest pause.

(g) **Bal Machalan :** Procedure : It resembles the natural movements of an infant when it weeps lying on the ground. The legs are moved as if cycling and arms also made to rotate in a circular manner.

**Frequency :** Ten to fifteen times, done continuously without a rest pause.

#### (ii) **Katibadhasana**

(a) **Position 1 :** Procedure : While lying on the back, the arms are stretched out and the knees bend so that the feet rest on the ground close to the hips. Keeping both legs together the waist is rotated so that the knees touch the ground on right side. At the same time, the head is turned on the left side, looking at the out-stretched left hand. Then both the legs and the head are brought back to the original start position. This is repeated in the opposite direction i.e. legs rotated to the left and the head to right.

**Frequency :** Five times, done continuously without rest pause.

(b) **Position 2 :** Procedure : While lying on the back, the position is maintained as in 2(a) above. The feet are now kept one to one and half foot apart. The exercise is repeated in the same manner as 2(a) above.

**Frequency :** Five times, done continuously without a rest pause.

(c) **Position 3 :** Procedure : Lie down on the stomach. The two hands are kept one on the top of the other, below the chin. The legs are bent at the knees till the feet touch the hips. The waist is rotated so that the feet touch the ground on the left and right side. At the same time the head is rotated so that the feet can be seen.

**Frequency :** Five times done continuously without a rest pause.

#### (iii) **Serpasana**

**Procedure :** Lying down flat on the ground with the face downwards, the palms touch the ground by the side of the shoulders. Now the head is raised and the whole of the front position of the body, stressing over the palms with tongue sticking outwards, mouth wide open and legs stretched. Inhale as much as possible. It is done while raising the body with slow exhalation and while coming down to the original position.

**Frequency :** One or three times, with a rest pause after each attempt.

#### (iv) **Shalabhasana**

**Procedure :** Lying flat on the ground, face is kept downwards and the hands on the ground near the thighs. Now the palms are pressed and the legs are raised up with feet placed together to a height of nearly 2 feet and the head to a height of one foot. The breath is held after deep inhalation and the body is stretched to bring it in a shape resembling a bow. Care must be taken to balance the body on the centre without the least pressure on the urinary organs. Feet must be held together.

**Frequency :** One to three times with a rest pause after each attempt

#### (v) **Dhanurasana**

**Procedure :** Lying on the stomach and the feet are held with the hands by pulling them towards the hips. Now retaining the inhaled air, stretch the body to bring it in a shape resembling a bow (hence Dhanurasana). Care must be taken to balance the body on the centre without the least pressure on the urinary organs. Feet must be held together.

#### (vi) **Mahamudrasana**

**Procedure :** Sit with legs stretched, touch the right perineum with the heel. Inhale completely and hold the breath. Now touch the left knee with the head with both the hands holding the toe while slowly exhaling. Then return to the initial position while inhaling.

The above process is repeated with the other side also.

**Frequency :** Done once, maintained for about 1-2 minute.

#### (vii) **Paschimotanasana**

**Procedure :** Sit with both legs stretched forward. Hold the big toes of the feet with the two hands. Then

touch the knees with the head while exhaling slowly and keeping the legs straight. Now raise the head to its original position while inhaling slowly in a smooth manner.

**Frequency :** Done once, maintained for about 1-2 minutes. If due to stiffness, the person is unable to reach the full pose then support is provided. Pillows are placed between the head and knees and the pose maintained. This allows flexibility to develop gradually.

#### (viii) Rollier

A regular wooden cylindrical piece of suitable size and diameter is wrapped with cotton and cloth to make it compact and comfortable to be used as a roller.

**Procedure :** Place the roller under the waist with the back facing the ground. Now keeping the feet on the ground, head raised and hands supporting the thighs, take the roller up till neck and then bring it back to the waist.

#### (ix) Ardha Chakrasana

**Procedure :** This is performed with the help of support. Folded blankets are under the waist, so that the hips and waist are raised approximately one foot above the ground. The shoulders should rest comfortably on the ground. The legs are kept bent or stretched out straight as convenient. Both the feet rest on the floor.

**Duration :** Done for five minutes only once. If the person is unable to perform the previous asanas (Nos. iii, iv and v) the duration of the *Ardha Chakrasana* can be increased upto ten to fifteen minutes.

#### (x) Ardha Sarvangasana

**Procedure :** The waist and hips rest on pillows or folded blankets, raised to a height of half to one foot. Legs are then raised up, perpendicular to the ground. Support is provided to the legs with the help of the wall to allow the pose to be maintained without strain.

**Duration :** Five to ten minutes.

#### (xi) Shavasana

**Procedure :** Lying down straight on the back on the ground, the arms are spread on the two sides a little away from the body towards the feet. The body is completely relaxed.

**Duration :** It is practised for two or three minutes at the end of asanas.

### 3. Pranayama

*Nadi Shodhan* pranayama or Purak and Rechak with blocked alternate nostril followed by Kumbhak was performed as follows :

**Procedure :** The person is made to sit cross legged with the hips on the pillow and legs on the ground. The back can take support of the wall if required, to be comfortable and to maintain an erect spine which is important in pranayama. A pillow can be used as well to support the lower back. Preliminary preparatory exercises include slowly inhaling and exhaling through one nostril, while keeping the other one closed. This is repeated with both right and left nostrils. The emphasis is on following the natural rhythm of breathing, while gently prolonging the inhalation and exhalation to a comfortable duration.

In the *Nadi Shodhan* pranayama, deep inhalation is taken through the right nostril. The breath is retained for a comfortable duration and then released through the left nostril. Now the process is reversed by inhaling through the left nostril and releasing through the right. The breath is retained outside at the end of exhalation for as long as comfortable. This is one cycle.

**Frequency :** Five to ten cycles.

**Instructions for home practice**

The home practice was same as the supervised practice. Once more, the need for the regularity of home practice was emphasised. They were reminded that in Yoga one gradually builds up the body's natural resistance. Moreover, it is process of inner cleaning and balancing. It has to be done regularly, daily accumulation of stress or strain has to be undone, instead of being allowed to build up.

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