

# Impact of Yoga in Dental Practice

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## Abstract

Dentistry is perceived as a profession that is more stressful than other jobs. Many occupational health problems persist in modern dentistry. It is high time we, the dentists, also inculcate the practice of performing Yoga in our daily life regime, to strengthen our muscles of neck, shoulder and back, to save ourselves from musculoskeletal pains. The “Asana” recommended in the Yoga, specifically for posture-related problems can be of great help to the dental professionals in managing their day to day muscular discomfort and pain. The need of the hour is just to modify our lifestyle to get the maximum out of our professional and personal life. This review article focus on the importance of yoga in dental practice.

**Keywords:** Yoga, Dental Practice, Healthy Body and Mind.

## Introduction

In one of the holy texts of old times – the Rig Veda, the term “Yoga” was first mentioned which is a derivative of the Sanskrit word “YUJ” which means ‘to join’ or ‘to yoke’ or ‘to unite’. Over 5 thousand years ago the foundation of yoga was laid down by the Indus – Sara swat civilization.<sup>1</sup>

Yoga focus on a healthy mind in a healthy body concept that helps in controlling an individuals mind, body and soul.<sup>2</sup> It builds confidence and helps in maintaining a healthy lifestyle. Yoga is versatile, pleasurable as well as highly beneficial for dentists to battle stress and apprehension and to decrease work-related musculoskeletal pain.

Dentistry, as a profession, is very demanding, in terms of the focus and precision required while performing the

procedure, more so, because we are working on a very small area, which requires sheer attention. In doing so, many times, we forget or overlook the posture in which we are working continuously for long hours.<sup>3</sup> When the dentist is working in a sitting position, over half of the body muscles provide support, to enable the body to be in a static position. If the same posture is continued for a longer period, muscle ischemia happens. As a result, what we get in return is the musculoskeletal disorders that exhibit in the form of pain. The intensity of this pain can vary from mild discomfort in the neck, shoulder and back region to excruciating one, so much so that it leaves us with no choice but for placing a halt on our professional work and then rushing to the concerned specialists for management and respite.<sup>4</sup>

As a substance of fact, as it is said “small things can make a big difference,” as a fact of our life like a simple change in our lifestyle, can make a huge difference in the way we can escape this health hazard which is gulping the entire dental fraternity worldwide, like a monster.<sup>5</sup> The “International Yoga Day” was celebrated worldwide on June 21, 2015, attracting everyone’s attention on this indigenous tool in the prevention of various health-related issues.

## Advantages of yoga<sup>6</sup>:

- a. Improvement in cardio-respiratory efficiency

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- b. Improvement in exercise tolerance
- c. Harmonious balance of autonomic function
- d. Improvement in dexterity, strength, steadiness, stamina, flexibility, endurance, and neuromusculoskeletal functioning
- e. Increase in alpha rhythm, inter-hemispheric coherence and homogeneity in the brain
- f. Improved sleep quality and improved cognitive functions
- g. Alteration in brain blood flow and brain metabolism as well as
- h. Modulation of the neuroendocrine axis.

It is high time we, the dentists, also inculcate the practice of performing Yoga in our daily life regime, to strengthen our muscles of neck, shoulder and back, to save ourselves from musculoskeletal pains. The “Asanas” recommended in the Yoga, specifically for posture-related problems can be of great help to the dental professionals in managing their day to day muscular discomfort and pain. The need of the hour is just to modify our lifestyle to get the maximum out of our professional and personal life.<sup>7</sup> This paper aims to stress the benefits of yoga for dental surgeons.

#### **Why introduce Yoga for dental students and professionals?<sup>8</sup>:**

- a. Improved visibility is gained, sitting at one place for a long duration as well as working in the desktop and keyboards can very well put massive strain on the musculoskeletal system.
- b. Mutual understanding with disobliging teammates and with fearful patients as well as job-related frustrations can become overwhelming.
- c. Results in stress, anxiety, anger, and depression.
- d. Prevalence of general musculoskeletal pain is estimated to be between 64% and 93%
- e. Major issues : – back pain (36.3-60.1%) – neck pain (19.8-85%).
- f. Risk factors include:
  - static and awkward posture of clinical practice
  - other non-ergonomic work practices.

It has been recently suggested that Yoga may be a good way for dentists to relieve stress and reduce the

risk of repetitive strain injury and dysfunctional posture. Another survey amongst 220 dentists found noteworthy differences in existing cases of musculoskeletal pain among those who practice yoga as compared to those with no regular activity over 12 months.<sup>9</sup>

#### **Yoga can improve your health in various ways like:**

##### **1. Yoga Stimulates Saliva Production:**

- Bacterial count in the oral cavity increases because of the reduction in salivary production. Bacteria can thrive in an environment like dry mouth which later results in plaque formation, tooth decay, and gum disease.<sup>10</sup>
- Regular yoga with practicing breathing method can help avoid mouth and throat from drying. Increase saliva production is related to some yoga poses like inverted poses, twists and forward bends.
- The Khechari mudra—is a type of attitude or honour which should preserve vitality. Method of performing the Khechari Mudra are simple -Rolling tongue backward as if it enters the nasal cavity to touch uvula inside the mouth. Breathe in as well as with a snoring type of sound from inside throat. Breathe out and swallow some saliva that was deposited in your mouth while releasing from the posture of your yoga style.<sup>7,10</sup>

##### **2. Yoga Improves Posture :**

- A good body posture gives us many benefits like good memory along with brain functions, improved breathing, less stress, healthier mood, stronger core muscles, better confidence and more energy as well as better productivity.<sup>11</sup>
- Improper posture can affect the spine and neck as well as the mouth. The mandible shifts forward after a person slouches causing the teeth of both the jaws in malalignment position. During this the head moves back and compress the spine. If left untreated, there will be stress on the surrounding muscles, bones and also in joints. It also can create pain and inflammation in the muscles and joints involved in the opening and closing of the mouth.<sup>7,12</sup>
- Jaw issues like temporomandibular joint disorder can also arise from improper continuous posture. This disorder can have common side effects that consist of a clicking sound or pain while opening the jaw, tenderness in the face can be felt, chronic headaches and changes in jaw alignment resulting in

rough wear of the teeth. (13) Poor posture can also lead to poorly balanced shoulders causing stress on the ribs as well as the organs underneath.<sup>14</sup>

### 3. Bad breath:

- Also known as halitosis is a distinctly unlike able odour that can be felt while breathing. It results in fretfulness in exaggerated person. There might be various etiologies for halitosis that includes all improper oral hygiene habits but problems with our gut can also be a reason that leads to bad breath. This type of sign and symptoms is known as dysbiosis which is an imbalance between the good and bad bacteria in our gut, as well as the presence of yeast or candida in the gut.
- Certain yoga postures are there that can unswervingly involve the digestive as well as respiratory organs. By improving blood circulation and manipulating functions of the kidneys, lungs, stomach, kidneys or liver and also removing toxins is encouraged. All this may help cure and prevent bad breath. Yoga posture like Lion Pose or Simhasana– The Cooling Breath or Sheetal Pranayama – The Psychic Union Pose or Yoga Mudra, Kapalhati breathing are some of the asanas that can help out in curing halitosis.<sup>12,15</sup>

### 4. Yoga reduces Stress:

- More stressed focus less on the maintenance of good oral health.<sup>16</sup> Stressed people have a habit of grinding their teeth resulting in micro-cracks and broken fillings and worn down teeth results in nerve damage; the teeth that are grounded down to the dentin results in sensitivity to heat and cold; gum recession because of pressure on the gum line; loose teeth and gingival pockets due to the motion of teeth grinding; headache and aching jaws because of overworked jaw muscles; and jaw impairment.<sup>9</sup>
- Stress causes the salivary glands by slowing down the production of saliva resulting in dry mouth and gives a suitable environment for bacteria to thrive. These kinds of bacteria cause serious dental issues like inflammation in the gums. Stress exacerbates inflammation in the gums which can lead to more serious dental issues and even general health issues. From regular yoga practice, stress can lessen the body can be maintained mentally and physically healthy.<sup>9</sup>

**Some other professional hazards for dental surgeons are:**<sup>13</sup>

- Lower back pain
- Cervical spondylosis
- Eye problems because of continuous and constant focus into the oral cavity where light has less power
- Varicose veins in lower limb

**Prevention and cure by doing yoga therapy**<sup>3,10</sup>:

**Bhujangasana:** This pose lengthens and strengthens the back and shoulders caused due to improper flexibility of upper and middle back. It helps to reduce fatigue and stress. This yogasana has been shown to reduce chronic pain associated with Musculoskeletal and joint diseases. It also helps in treating Cervical spondylosis.

**Padmasana:** This Asana works wonders for the spinal cord by keeping it erect, healthy and flexible. In the Asana the lungs get packed with air-filled oxygen. By leg pulling the nerves, muscles and bones are stretched tight thus massaging the legs meticulously and keeping them healthy.

**Sirshasana:** This Asana helps in providing conditioning to the brain, eyes and ears due to increased blood pressure. It also helps in improving concentration and memory. This Asana improves blood circulation in the organ of both the normal and diseased eyes.

**Vajrasana:** This asana helps in the impediment of varicose veins which take place because of prolonged standing. This Asana helps in the majority of cases. Because of this asana, the blood flow to the lower limbs is reduced, muscles are stretched and these varicose veins are cured.<sup>16</sup>

## Conclusion

Practicing regular yoga can help in preventing and treating many long term diseases as well as can help in achieving good oral health. Yoga heals the body, mind and soul by stress reduction and also by increasing the motivation level. The inflammatory response decreases and increases in the immunity to attain good gingival health and healing after extractions and oral surgical procedures is achieved by performing regular yoga. The lifestyle of a yogic is always lean towards nature, it helps in the impediment of dental as well as soft tissue disorder of the mouth which are the result of the stresses of life.

It is high time that we the dentist include the practice of performing yoga in our daily life regime. Asana recommended in yoga especially for posture-related problems can be of great help to the dental profession in maintaining their day to day muscular discomfort and pain. By practicing regular yoga, it rejuvenates and revitalizes all the organs of the body. So devoting 40 to 50 minutes on an average day to yoga, we can remain fresh mentally and physically and it will keep us away from professional hazards.

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