



Role of Numerous Yoga Asanas on Neck Discomfort from an Alternative Medicine Perspective: A Common Overview

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Abstract

The purpose of this study was to look at how yoga poses affect neck discomfort. Yoga enhanced quality of life in terms of health and reduced the severity and impairment of neck pain. Compared to males, women had a greater prevalence of neck discomfort in 2020, with a gender-specific age-standardized prevalence of 2890 (95% uncertainty interval UI 2330–3620) per 100 000 in women and 2000 (1600–2480) per 100 000 in men. Musculoskeletal diseases (MSD) are now the most often diagnosed occupational disease in India, and working with computers is often seen as a new risk factor for these conditions. The risk of developing musculoskeletal diseases is higher among office workers who spend a lot of time in front of computers. Search terms were neck pain, the therapeutic effect of neck pain, neck syndrome, myofascial pain of neck, neck disability, chronic neck pain, Yoga, and Prevalence of neck pain. Hatha Yoga improves strength, range of motion, balance, and agility, reduces pain, enhances flexibility and muscle tones, and releases muscle tension. Almost all studies showed a significant improvement with Yoga on neck pain intensity, neck disability, cervical ROM (range of motion), anxiety, and QOL (quality of life).

Keywords: Yoga; Yogaasanas; Neck Pain; Computer work

Abbreviations

MSD: Musculoskeletal Diseases; ROM: Range of Motion; QOL: Quality of Life; UI: Uncertainty Interval.

Introduction

In the wider population, neck discomfort is a prevalent musculoskeletal issue with a lifetime frequency of 14-70%. Two thirds of people have neck pain at some point, with a postural or mechanical foundation. It is most common in middle age. It can originate from any structure in the neck, including intervertebral discs, ligaments, muscles,

facet joints, dura, and nerve roots [1]. Neck problems can adversely affect physical, psychological, and social function. People often cite prolonged computer use during daily work and leisure activities as a cause of neck pain. Prolonged use of the computer, sitting with rounded shoulders, and the wrong neck posture disturb the normal lordotic curve of the neck, which causes muscle imbalance and, consequently, neck pain. Hatha Yoga improves strength, range of motion, balance, and agility, reduces pain, enhances flexibility and muscle tones, and releases muscle tension. Almost all studies showed a significant improvement with Yoga on neck pain intensity, neck disability, cervical ROM (range of motion), anxiety, and QOL (quality of life) [2].



Many people believe that using computers increases the risk of musculoskeletal disorders (MSD), which are now the most common occupational diseases in India. Globally, in 2020, neck pain affected 203 million (95% uncertainty interval [UI] 163-253) people. The global age-standardized prevalence rate of neck pain was estimated to be 2450 (1960-3040) per 100 000 population, and the global age-standardized years lived with disability [YLD] rate was estimated to be 244 (165-346) per 100 000. The age-standardized prevalence rate remained stable between 1990 and 2020 (percentage change 0.2% [-1.3 to 1.7]). Globally, females had a higher age-standardized prevalence rate (2890 [2330-3620] per 100 000) than males (2000 [1600-2480] per 100 000), with the Prevalence peaking between 45 years and 74 years in male and female sexes [3]. The one-year incidence estimation of neck pain is around 20% - with a higher incidence reported among office and computer workers - and is reportedly higher in women. Furthermore, between 30 and 50% of the adult population have been experienced neck pain in the previous year and a

high percentage report recurrent pain [4].

Yoga is a holistic practice that has its roots in ancient India, encompassing physical postures (asanas), breath control (pranayama), meditation (dhyana), and ethical principles. With its holistic approach to health, yoga acknowledges that illnesses outside the physical realm can also have emotional and spiritual roots. This makes yoga a potent type of mind-body medicine [5].

According to the yoga sutras, "asana" is described as "Sthira-sukha-masanam" which means the position of the body in which the body remains stable and comfortable without moving is called Asana. Yoga asanas is designed to promote specific physical and mental health, strength, flexibility, and balance, as well as to prepare the body and mind for meditation. It is widely acknowledged that yoga asana plays a significant role in neck pain therapies for individuals. The yoga interventions Exercises, asanas, and meditation were included in the yoga interventions. Here is being given many Asanas as follow in the table:

1	Greeva-sanchanasana	Neck Movements
2	Trikonasana	Triangle pose
3	Marjariasana	Cat stretch pose
4	Makarasana	Crocodile pose
5	Bhardwajasana	Pose of a wise
6	Setubandhasana	Spinal twist pose
7	Dhanurasana	Bow pose
8	Salabhasana	Locust pose
9	Gomukhasana	Cow facing pose
10	Tadasana	Mountain pose
11	Bhujangasana	Cobra pose
12	Supta-udarakarsana/Markatasana	Spinal twist pose)
13	Ardh-matsyendrasana	Half lord of the fishes pose)
14	Balasana	Child pose
15	Ushtrasana	Camel pose
16	Savasana	Bridge pose

Table 1: Asanas.

Hatha Yoga, which combines movement and muscle development with stretching, breathing, and relaxation, is a promising form of exercise as an additional therapy for Neck pain, with promising evidence for beneficial effects. Yoga improves health-related quality of life and lessens the severity and impairment of neck discomfort. Yoga has also been used to improve neck posture and relieve neck pain. There are many studies that have assessed the efficacy of Yoga for neck pain; however, the results are inconsistent

[6]. The functional status of neck muscles are indicated by improved physiological measures of neck pain. It is important to understand muscle activation patterns and performance in terms of the body's kinematics and how long an asana practitioner stays in their ultimate position [7]. Yoga has been evaluated in numerous trials as a treatment for either chronic nonspecific neck pain or chronic neck pain. The aim of this study was to review published trials on the effectiveness of yoga asanas for neck pain.

Methodology

Extensive literature searches were performed across several kinds of electronic databases, including Google Scholar, PubMed, Scopus, and Web of Science. Studies that qualified were written in English and published. The whole articles were examined to see if they fulfilled the requirements for selection. Search terms were neck pain, the therapeutic effect of neck pain, neck syndrome, myofascial pain of neck, neck disability, chronic neck pain, Yoga, and Prevalence of neck pain. No restrictions were made on length, duration, frequency of yoga type of Yoga, programs. Eligible intervention studies included those evaluating yoga postures, breathing, and meditation for neck pain. For musculo-articular decompression and mobilization, the yoga routine comprises sitting, standing, prone, and supine positions along with twists, flexions, and extensions, as well as forward and backward bends and arching [8].

Results

Several research studies have demonstrated the effectiveness of traditional isometric, Pilates, and yoga workouts. The supervision of seasoned yoga instructors oversaw the yoga interventions. Exercises, asanas (such as Greeva Sanchanasana, Trikonasana, Marjariasana, Makarasana, Bhawdwasana, Setubandhasana, Dhanurasana, Salabhasana, Gomukhasana, Tadasana, Bhujangasana, SuptaUdarakarsana/Markatasana, Ardh Matsyendrasana, Balasana, Ushtrasana, and Savasana), and meditation were included in the yoga interventions. Various types of neck pain were included: neck pain, chronic neck pain, neck disability, chronic mechanical neck pain, chronic nonspecific neck pain, and myofascial pain syndrome of the neck. Most studies assessed neck pain intensity and disability.

Apart from pain reduction, the quality of health and functional capacity both saw notable improvements. The yoga intervention was delivered under the guidance of experienced yoga instructors [7]. The functional status of neck muscles are indicated by improved physiological measures of neck pain [9]. Almost all studies showed a significant improvement with yoga on neck pain intensity, neck disability, anxiety, cervical ROM, and QOL [8].

Discussion

Muscle tension is one of the main causes of neck pain. The results revealed that the yoga group's muscles had lessened tension, flexibility, and improved muscular tone, increased range of motion, and significantly and clinically reduced pain intensity. Yoga significantly improved cervical ROM, anxiety, QOL, and the degree of neck discomfort in almost all investigations. Ardh-matsyendrasana demonstrated

greater improvement in the quality of life parameters mental and physical component scores for bilateral sub-acute mechanical neck pain cases, as well as in the neck's flexion, extension, lateral flexion, and right and left rotation range of motion [10]. When if doing Griva-sanchanasana, the inter-spinal muscles erector spinae and are stretched by pressing the chin inward towards the sternum. The scalene and sternocleidomastoid, trapezius, levator scapulae, and sub occipital muscles are stretched by bending the neck to the right and left [8]. Ushtrasana improves flexibility of neck and spine. Pain is reduced when performing Ushtrasana, and stiffness is reduced by gently stretching muscles and joints, which also releases tension in the muscles and enhances flexibility. Regular practice of Ushtrasana results in relaxing of tense muscles, and natural adjustment of posture [11].

All of the aforementioned outcomes showed improvement in the yoga group, and there was a significant difference in mental QoL, anxiety, and sadness as well as in the neck pain-related impairment, and intensity of neck pain between the yoga and exercise groups. Regarding neck pain, yoga asana is frequently suggested as an extra, evidence-based therapeutic strategy. Yoga appears to be able to enhance body awareness, pain acceptance, and coping mechanisms beyond just physical activity.

Conclusion

The purpose of this review was to assess how yogaasanas can help with neck discomfort. Almost all studies showed a significant improvement with yoga on neck pain intensity, neck disability, cervical ROM, anxiety, and QOL. It has been discovered that yoga significantly reduces the severity and functional impairment of neck discomfort while also increasing range of motion, improving muscular tone and flexibility, and releasing tension in the muscles. Proper posture and spinal alignment are encouraged by yoga, which can ease and lessen the aberrant strain on the cervical spine and stress. Maintaining the natural curvature of the spine through proper posture through yoga asana helps to avoid neck disabilities. The review emphasizes that including yoga asanas in the neck pain treatment regimen not only helps with physical health but also significantly improves the patient's overall quality of life. These results highlight the comprehensive benefits of yoga and call for its wider use as a supplemental therapy for neck pain. Yoga has the potential to be used as a safe, inexpensive, and helpful supportive treatment that just needs patients' motivation.

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