

## Benefits of Yoga Practice in Aging Population

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**Abstract:** *The term “aging population” implies shifts in the age distribution of a population toward older ages. The population of senior citizens is growing rapidly as well as their interest in leading active and fit lives. In this paper, yoga is perceived as suggestion of mobility and reduction of many health problems in aging population. Having in mind health benefits that yoga practice provides, some insurance companies cover the costs of yoga practice. Yoga can be seen as important tool that can be used with the aim to solve the health concerns of the aging population.*

**Key Words:** *yoga, aging, ancient practice, health concerns.*

### Introduction

Aging population (also known as “aging of population”, “demographic aging” or “population aging” is a summary term used for shifts in the age distribution (i.e. age structure) of a population. The aging of population is often measured by increases in the percentage of elderly people of retirement ages. The definition of retirement ages may vary but a typical cutoff is 65 years, and now-a-days a society is considered relatively old when the fraction of the population aged 65 and over exceeds 8-10%. This fraction of population (aged 65 and over) is termed as “senior citizens”.

The population of senior citizens is growing rapidly as well as their interest in leading active and fit lives. On the whole, people live longer today than they used to, and they all want high-quality living and good health to be a part of older years. However, they typically become more susceptible to ailments that are linked to aging, and, as a result, they are likely to move less. The less they move, the more susceptible they become to a variety of ailments, and so it becomes a truly vicious cycle.

Although it is advocated that people should follow the advice to be less active and do things slowly as they grow older, that is actually what people shouldn't do. There are several ailments associated with aging and inappropriate behavior.

- Extended periods of sitting lead to muscular shortening, tightening and weakening;
- Lack of weight-bearing activity contributes to osteoporosis; and
- Lack of movement and stretching leads to joint deterioration and loss of flexibility.

Of great concern for senior population is the lack of balance which stems, in part, from sitting rather than standing and from not challenging one's balance in various positions. Complications resulting from falls among senior people lead to a multitude of serious problems, sometimes culminating in death.

Many health concerns have been linked to the sedentary lifestyle which is typical for many older people, but only for them. That life style leads to the following:

- reduced joint flexibility,
- arthritis/bursitis,
- high blood pressure,

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- increased body fat and decreased lean body tissue,
- osteoporosis,
- low back pain,
- breathing difficulties,
- poor blood circulation,
- vision problems,
- chronic pain,
- stress-related symptoms, and
- inability to sleep peacefully.

In light of growing senior population and the health conditions associated with aging, researchers are beginning to take a closer look at the health concerns of this population and at how these issues can be addressed. Yoga practice is considered by many to be a tremendous tool for combating the concerns of an aging society.

This paper aims to primarily give valuable insight into the health benefits of yoga practice for senior citizens. It explains how yoga can be used with this population to increase mobility and reduce many health concerns facing the elderly.

### **Health benefits of the yoga practice to seniors – research findings**

As mentioned above, researchers, across the regions of the globe, have discovered several health benefits of yoga for aging population. Here, eight benefits of yoga therapy have been identified: (1) sleep, (2) strength/arthritis, (3) diabetes, (4) hypertension, (5) excess weight, (6) mood/anxiety, (7) chronic pain, and (8) lung problems/breathing difficulties. Brief description of health benefits of Yoga for senior citizens or aging population for these eight indicators is presented below:

**Sleep:** Older adults are often plagued with difficulty falling asleep and staying asleep. The result is a fragmented, poor night's sleep which reduces daytime alertness. In many cases it is advisable to avoid the use of pharmaceutical sleep aids in older people due to the risk of side effects.

A recent study compared the impact of Yoga, including physical postures, relaxation techniques, and voluntary regulated breathing, and *Ayurveda* (herbal preparation) on sleep in the geriatric population. Sixty-nine seniors living in the same residence were stratified based on age and were randomly assigned to three groups: Yoga, Ayurveda and Wait-list (no intervention of any sort).

The groups' sleep patterns were evaluated via self-assessment over a one-week period prior to the intervention and after three and six months of their respective interventions. The yoga group showed a significant decrease in the time it took to fall asleep (an approximate average decrease of ten minutes) and an increase in the total number of hours slept (an approximate increase of 60 minutes). The other two trial groups showed no significant change in sleep. The study's conclusion was that: yoga practice improved quantity and quality of sleep among the geriatric population.

**Strength/Arthritis:** A study was conducted that measured improvement in hand grip in rheumatoid arthritis patients versus non-arthritic volunteers following Yoga training. The results have shown that hand grip strength in both hands (measured with a grip dynamometer) increased in non-arthritic adults and children who didn't have rheumatoid arthritis and in rheumatoid arthritis patients following yoga. Hand strength did not improve among the corresponding control groups.

**Diabetes:** A study at the University College of Medical Sciences in New Delhi evaluated 30-to-60 year old patients with Type II diabetes. A 40-minute-per-day regimen of yoga was followed for a period of 40 days. The results showed a significant decrease in fasting blood sugar levels. Furthermore, these patients showed an average improvement in lung capacity of approximately 10%. This suggests that, over a period of time, Type II diabetics can achieve better blood sugar control and pulmonary functions when they follow a daily yoga regimen.

**Hypertension:** Researchers at Bhabha Atomic Research Centre, Medical Division, in Mumbai (formerly known as Bombay), India, evaluated the overall benefits of yoga on risk factors for heart disease. A group of 20 patients, 35 to 55 years of age, all of whom had mild to moderate high blood pressure, began a daily one-hour yoga program. Prior to the implementation of their yoga program and following three months of yoga, biochemical and psychological parameters were studied. The overall results were quite impressive: after three months of yoga practice, the patients experienced a decrease in blood pressure, as well as a decrease in blood sugar, cholesterol and triglycerides. Feedback also indicated that the patients were calmer.

**Excess Weight:** Recent research found that practicing yoga regularly for at least half an hour per week may help offset middle-age weight gain. It is estimated that people typically gain about half a kilo per year between the ages of 45 and 55. Researchers at Fred Hutchinson Cancer Research Center found that weight gain in those who practiced yoga weekly for at least four years had a 1.5 kilos reduction in expected weight gain.

**Mood/Anxiety:** The Harbor-UCLA Medical Center conducted a study to assess what effect yoga has on stress levels. During the study, all participants expressed that their moods and anxiety levels were improved as a result of their yoga sessions.

**Chronic Pain:** Yoga practice has been shown to aid those suffering with chronic pain. A study by the Harbor-UCLA Medical Center found that patients experiencing chronic pain either improved or maintained their symptoms after only four weeks of practicing Yoga. No patients experienced deterioration, and every patient significantly reduced the amount of needed pain medication.

Many people speculate that any form of group activity, be it yoga or otherwise, is mood-elevating for seniors as they may be living alone and/or have limited social interaction due to physical limitations. The social aspect of attending a group exercise class is invaluable. "The contact group provides a sense of belonging".

**Lung Problems/Breathing Difficulties:** Breathing difficulties in 86 bronchial asthmatics were treated by a yoga breathing procedure composed of simple neck muscle relaxation movements and postures (*asanas*) with breathing exercises. Within approximately 30 minutes, 70% of the episodes were relieved. The patients gained confidence in this breathing technique and used it before resorting to prescription medication. Reduced anxiety worked well toward relieving the acute breathing difficulty episodes.

### **Health benefits of yoga practice for senior citizens**

Yoga is possible fitness solution for older people. Yoga incorporates a series of gentle exercises, breathing patterns, balance, concentration and meditative practice.

Preventive effect can be expected if yoga is practiced regularly with guidance of the certified yoga teachers. Yoga practice can significantly decrease a senior citizen's risk for developing a variety of medical conditions, which include: obesity, diabetes, hypertension, anxiety and depression.

The gentle aerobic stretches of yoga keep the cardiovascular system healthy and encourage proper body functioning. An exercise session also helps burn excess calories, which keeps body weight and body fat levels regulated. And although yoga cannot prevent all medical conditions, it can often help ease the symptoms of the conditions it cannot control. For example, yoga's gentle stretches can significantly improve the pain associated with: arthritis, cancer, carpal tunnel syndrome and chronic back pain.

Second, there are other several advantages of yoga practice for seniors in terms of better stability and flexibility. One of the most significant concerns among senior citizens is the risk of falls. As the body ages, the bones, muscles and joints become weak and it becomes increasingly difficult to move. Yoga, however, challenges seniors to use their own body weight to improve their overall body strength. Yoga also requires a heightened awareness of a person's own body as a person moves through the various poses. As the bones and muscles

strengthen and the sense of body awareness improves, most seniors develop better stability, flexibility and balance. As a result, the risk of falls significantly decreases.

During the later years of life, it often becomes increasingly difficult to obtain a full, restful night's sleep. Many older adults not only have a difficult time falling asleep, but also have a hard time staying asleep throughout the night. As a result, they cannot achieve a complete night of sleep and often feel tired and fatigued throughout the daytime. However, the physical postures and relaxation techniques used in a regular yoga practice can help senior citizens obtain better sleep.

Emotional benefits of yoga are of utmost importance. As senior citizens move into the late stages of life, symptoms of depression and anxiety may begin to appear. Transitioning from an independent adult to a dependent senior citizen can be a frustrating and discouraging experience. Many seniors experience loneliness as children grow up and start their own families and spouses and close friends pass away. Physical limitations may require them to move out of their homes into a new, unfamiliar place. The loss of independence, chronic pain, loneliness and new illnesses can easily trigger symptoms of anxiety and depression. However, yoga's focus on mind-body connection can help senior citizens relax and obtain a more positive outlook on life. Even some insurance companies now cover the cost of yoga classes because of the far-reaching health benefits that have been reported. Most United States medical schools now include courses in these alternate forms of therapy. The number of yoga participants, both young and old, is expected to continue to increase as a result of the proven health benefits of this ancient practice. Yoga instructors should respond, in turn, by focusing efforts on adapting yoga programs for the health and well-being of the aging population.

### **Program of the yoga exercises for all ages**

Yoga has been shown to help alleviate or reduce many of the health challenges, making it an increasingly popular exercise choice for older adult population. Senior yoga classes are popping up everywhere: health clubs, senior centers, assisted living residences, and even church basements.

The many benefits of yoga have long been said to slow the aging process. This is undoubtedly a good part of the reason that this 4500 year old practice has survived and flourishes today. It is also a primary reason that yoga, according to the 7th Annual IDEA Fitness Programs Report, has experienced the most growth of any fitness program over the past seven years.

Armed with knowledge of the medical conditions of class participants and the ability to modify poses to accommodate each participant's health circumstances, a well trained yoga instructor can benefit all, particularly the senior participants.

Yoga for senior citizens is becoming very popular also because of the results of the researches which show that it can help in:

- a) prevention of osteoporosis,
- b) help boost blood circulation, and
- c) help strengthen the heart.

Yoga practice renews and revitalizes senior citizens mentally and emotionally. Senior citizens who practice yoga, influence:

- An increase in body awareness and control,
- Relieve chronic stress patterns in the body,
- Refreshes the body by relieving muscle strain,
- Relaxes the body,
- Sharpens the mind and increases concentration, and
- A great way to counter chronic pain symptoms such as those that are attributed to arthritis.

## Yoga – key elements

**Union of Mind, Body, and Spirit:** Yoga is considered a holistic experience which rejuvenates the mind, body and spirit. The yoga practice is calming and provides a rare opportunity to leave the outside world behind and be at peace. Yoga focuses attention on physical, mental and spiritual aspects of the practitioners themselves.

**Mindful Breathing:** As people age / grow older, they stop breathing fully. Yoga reminds that it is important to exhale as fully as people inhale. As they grow older, they lose flexibility in their ribcage, and sometimes suffer from spinal deformities, creating less room for lung expansion. Mindful breathing takes into consideration the three purposes of breathing: (a) *replenishing*, (b) *warming*, and (c) *cleansing*. Focusing on full inhalations and exhalations serves to slow down the heart rate which, *in turn*, improves focus and increases concentration.

**Asana/Pose:** Correct positioning of an asana includes: that a balance is realized between each side of the body and that no undue stress is placed on any particular organ, muscle, joint or bone.

## Yoga instructors work with seniors

Certified yoga instructors should know that work with older adults is specific and that approach to them requires certain attention.

- Be aware of health concerns and ability level for each of your class participants. Keeping class size small, will help in taking care of each individual.
- Always cue body alignment and posture. Also, slow down the transition between poses. This can be accomplished by cueing each pose thoroughly.
- Reduce the length of time for which an asana is held. Older participants may not have the strength required to hold the pose for a longer period of time but will gain strength from practicing the pose even for ten or fifteen seconds. The pose can be repeated, if needed.
- Avoid the use of Sanskrit labels for the poses. Using terminology that participants understand will help them to remember and master the poses.
- Train your participants to focus their gaze in a specific spot to assist with balance. This is especially important with older adults whose balance may be challenged. In rotational poses, advise your senior students to focus their gaze toward the ground or straight ahead rather than upward.
- Whenever you cue the class to stretch one area, cue them also to release tension in another.
- Focus on the participants' success. Encourage them and praise their efforts. Create a supportive environment, and your students will want to come back for both the health benefits and the psychological perks.
- Offer plenty of options for each pose. Keep in mind that seniors often lack physical contact in their lives. Offer them modifications that encourage them to use each other for support and balance, when appropriate, to increase physical contact.
- Focus on poses which stretch and strengthen areas which are typically tight or weak in seniors. Ankles, hips, hamstrings, low backs, and pectorals need special attention. Be cautious of the weight that they put on their wrists as seniors' wrists are often weak.
- Do not perform a lot of complicated poses, but always include at least one pose that is a bit more challenging.
- Maintain behavior of respect for each practitioner individually in every moment.

## Suggested poses for an active senior yoga class

'Old age' is a stage when people have more time for themselves, family, leisure, recreation and relaxation. But at the same time, old age brings to them some ailments like arthritis, rheumatism, high blood pressure, loss of memory, etc. Thus, there is a high need for staying fit and healthy during this age. Practice of the yoga techniques (*asanas*, *pranayama*, meditation, relaxation, concentration) is power tool to keep senior citizens in good psycho-physical condition.

Yoga is a method of exercise that adapts to needs and abilities of senior citizens and deals with their whole state. It makes their body fitter, the mind calmer and more relaxed. Yoga is also beneficial in the prevention and control of common health and emotional problems that is linked with aging.

Some yoga *asanas* are designed to normalize blood pressure and balance the nervous system and are essential in the prevention of heart ailments and problems in the nervous system. The breathing techniques can make seniors feel refreshed and cleanses the air passages which can help prevent respiratory ailments.

Most importantly, the degeneration of the body among seniors set some limits to the types of exercises they can do. This leads to the practice of milder forms of exercise. It is imperative for senior citizens to adapt positions to prevent undue strain. Yoga instructor must teach them to listen to their body. If they continue to practice the postures, breathing in the correct way and flexing those little used muscles, they will reap the benefit from practicing yoga.

Yoga keeps the mind active and make the joints and muscles like “a well-oiled machine”. Many seniors in their 70’s and 80’s feel younger, more positive and more agile after they started actively practicing yoga. Yoga can also improve balance by strengthening the body and gives a senior an over-all sense of health and happiness in the later years of life.

## Conclusion

The number of yoga practitioners both young and old, continues to increase as a result of the proven health benefits of this ancient practice. Yoga instructors work more and more with the aging population in order to improve their health and quality of life. We can conclude that yoga (which can be practiced in all age groups) can bring health advantages to aging population. While young and middle-aged adults often attend yoga classes to achieve a lean and toned body, senior citizens can also use the techniques to slow the aging process. With a few modifications to yoga poses and a respect for the physical limitations of an aging body, seniors can easily participate in a healthy and active yoga session. In fact, the benefits of yoga for senior citizens extend far beyond the practice’s physical effects. Effects of yoga practice in older population should be research more because yoga is recognizes as possibility for better life quality in older age.

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