



# THE CRITICAL STUDY ON ROLE OF YOGIC THRAPIES AND AHARA VIHARA IN HYPERTENSION (HTN)

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## ABSTRACT

Worldwide, high blood pressure (BP) is a significant public health issue. It is a significant risk factor for congestive heart failure, chronic renal failure, acute myocardial infarction, and cerebrovascular illness. For those who are prehypertensive, lifestyle changes are crucial and can supplement antihypertensive treatment. It has been demonstrated that practising yoga can lower blood pressure in hypertensive people. Yoga likely lowers blood pressure through lowering sympathetic activity, promoting autonomic balance, which lowers chemoreceptor responses, and increasing baroreflex sensitivity. As an additional treatment, yoga can help people use less antihypertensive drugs. Our healthcare system must acknowledge yoga as a supplementary therapy for the treatment of hypertension. Yoga gives a lot of emphasis on living a good, healthy lifestyle, which consists mostly of achar (healthy activities), vichar (healthy relationships), vichar (healthy thoughts), Ahar (healthy diet), and Vihar (healthy recreation). The fundamental yogic concepts that can be used to the treatment of lifestyle problems are covered, including psychological reconditioning, the formation of healthy attitudes, stress management, metabolic normalization, and relaxation, visualization, and contemplative techniques.

**KEYWORDS** – Yoga, High blood pressure, Ahara & Vihar, Yoga therapy, etc.

## INTRODUCTION

In the past most individuals and societies viewed good health or wellness as the opposite or absence of disease. Health is a multidimensional concept and must be viewed broader perspective. An assessment of the client 's state of health is an important aspect of nursing. (Polit. F Denise, 2008) High blood pressure, also called "hypertension," is a serious

medical condition. It happens when the force of the blood pumping through your arteries is too strong.<sup>1</sup> When your heart beats, it pushes blood through your arteries to the rest of your body. When the blood pushes harder against the walls of your arteries, your blood pressure goes up. Your blood pressure may be different at different times of the day.<sup>2</sup> It is usually higher when you first wake up, after you exercise, or when you are under stress. Hypertension also known as high blood pressure is a long-term medical condition in which the blood pressure in the arteries is persistently elevated.<sup>3</sup>

High blood pressure usually does not cause symptoms. Long term high blood pressure, however, is a major risk factor for coronary artery disease, stroke, heart failure, peripheral vascular disease, vision loss, and chronic kidney disease. (Wikipedia) High blood pressure is classified as either primary high blood pressure or secondary high blood pressure.<sup>4</sup> About 90–95% of cases are primary, defined as high blood pressure due to nonspecific lifestyle and genetic factors. Lifestyle factors that increase the risk include excess salt, excess body weight, smoking, and alcohol. The remaining 5–10% of cases are categorized as secondary high blood pressure, defined as high blood pressure due to an identifiable cause, such as chronic kidney disease, narrowing of the kidney arteries, an endocrine disorder, or the use of birth control pills. Around 85 million people in the United States (U.S.) have high blood pressure.<sup>5</sup>

Hypertension and heart disease are global problems. The World Health Organization (WHO) suggests that the growth of the processed food industry has impacted the amount of salt consumed, and that this plays a role in hypertension. Yoga therapy is the adaptation of yoga practices for people with health challenges.<sup>6</sup> Yoga therapists prescribe specific regimens of postures, breathing exercises, and relaxation techniques to suit individual needs. The challenges may be an illness, a temporary condition like pregnancy or childbirth, or a chronic condition associated with old age or infirmity.<sup>7</sup> Yoga therapy is a type of therapy that uses yoga postures, breathing exercises, meditation, and guided imagery to improve mental and physical health. The holistic focus of yoga therapy encourages the integration of mind, body, and spirit. Modern yoga therapy covers a broad range of therapeutic modalities, incorporating elements from both physical therapy and psychotherapy.<sup>8</sup> Yoga can be a very beneficial therapy for controlling and lowering high blood pressure naturally. The gentle, soothing practice of yoga asana settles both mind and body and reduces stress a leading cause of hypertension.<sup>9</sup>

The Sanskrit word "YUG," which signifies yoke or unification, is where the word "yoga" originates. Yoga is an all-encompassing science that strengthens and enhances one's physical, mental, and spiritual well-being.<sup>10</sup> The disciplines involved with yoga's physical practices put an emphasis on enhancing the body's health and strength. Pranayama, or breathing exercises, asana, or certain postures, and meditation are examples of yogic practices. Hatha yoga, karma yoga, chi yoga, kundalini yoga, and raja yoga are some of the traditional yogic disciplines.<sup>11</sup> Chi yoga is associated with a culture of knowledge, hatha yoga encompasses both the spirit and the physical body, karma yoga promotes internal practice that results in faultless behavior, and raja yoga is associated with the mind and breath.<sup>12</sup>

Hatha yoga has gained popularity in recent years for enhancing psychological function, reducing stress, and treating a variety of mental and psychosomatic problems. Hatha yoga incorporates a variety of mind-body approaches, such

as physical postures, breathing exercises (pranayama), and meditation methods (dhyana) (asanas).<sup>13</sup> Yoga may lower blood pressure by causing gradual, rhythmic proprioceptive and exteroceptive impulses, which is the most likely mechanism. Moreover, it lowers the activity of peripheral adrenergic receptors, promotes autonomic balance, which lowers chemoreceptor responses, and increases the sensitivity of the baroreflex. Yoga has been utilized to effectively manage obesity, lipid profiles, glycemic management, and other CVD risk factors in addition to lowering high blood pressure.<sup>14</sup>

## **METHODOLOGY**

All the material related to Yoga and Hypertension has been collected from different articles, Authentic literatures, websites like (PubMed, NCBI, AYU)

## **EFFECT OF YOGA IN MODULATING THE STRESS RESPONSE**

It is crucial to recognize that yoga may help us manage stress better because stress plays a critical role in causing, predisposing to, or exacerbating all lifestyle illnesses. Based on the idea that yoga practices lessen allostatic load in stress response systems, optimum homeostasis is restored, Streeter et al. (2012) suggested a hypothesis to explain the advantages of yogic practices in a variety of, commonly comorbid medical illnesses.

### **They proposed that stress causes:**

- An imbalance of the autonomic nervous system (ANS), with decreased parasympathetic and increased sympathetic activity.
- Increased allostatic load,
- underactivity of the main inhibitory neurotransmitter system, the gamma aminobutyric acid (GABA) system.

### **They also proposed the following hypotheses:**

- Yoga-based practices can partially stimulate the vagus nerves, the primary peripheral conduit of the parasympathetic nervous system, to correct the GABA systems' and parasympathetic nervous system's underactivity.
- lessen allostatic pressure. According to the notion put out by Streeter et al., yoga practices can improve illness symptoms by reversing the reduced parasympathetic nervous system and GABAergic activity that underlie stress-related diseases.

Many stress-related problems, including anxiety, sleeplessness, depression, and bronchial asthma, can be treated with yoga. Yoga has also enhanced a variety of metabolic processes, including lipid profiles, blood pressure, and glucose metabolism. Health care professionals are now aware of yoga's potential to improve a range of medical ailments. Yoga is still not a popular method for lowering high blood pressure.<sup>15</sup>

Savasana poses, which promote entire body relaxation, have been shown to be beneficial for HPT in studies. A growing number of meta-analyses and systematic reviews have been undertaken to determine the effectiveness of yoga for treating hypertension in order to find the best clinical evidence for hypertensive patients. It has been shown that yoga can lower BP and HPT risk factors such as high cholesterol, obesity, and high blood sugar. According to a review research, yoga plays a crucial part in the primary and secondary prevention of ischemic heart disease. Yet, a comprehensive study found compelling evidence that the advantages of yoga when combined with other treatments can help prevent and cure coronary heart disease.<sup>16</sup>

According to a subgroup analysis of the aforementioned research, practising yoga helped those with metabolic syndrome lower their blood pressure temporarily. A second review discovered evidence for yoga's effectiveness in lowering blood pressure, body weight, cholesterol, and blood sugar levels significantly. According to one study, yoga can help individuals with hypertension. Despite the fact that there are relatively few randomized controlled studies, the study concluded that yoga may be an alternative to medications in treating HPT because it is less expensive than pharmaceutical therapy. Another review research on yoga and HPT found that several yoga techniques consistently reduced blood cholesterol, blood sugar, and body weight.<sup>17</sup>

## DISCUSSION

The BP decreases associated with yoga have been observed in a variety of demographics, including adolescents, the elderly, normotensive and hypertensive populations, as well as both unfit and sporty people. Yoga lowers blood pressure in hypertensive individuals while simultaneously lowering the dosage of existing drugs. Yoga activities often result in a meditative state of calmness, stillness, hypometabolism, autonomic balance, favorable physiological alterations, and enhanced cardiac, circulatory, and respiratory systems. Yoga therefore has the potential to affect blood pressure via lowering the stress response, boosting parasympathetic activity, and changing the sensitivity of the baroreceptors. The sympathetic reaction, which is connected to tension, aggressiveness, excitement, anxiety, and anticipation in stressful situations, causes a rise in blood pressure.<sup>18</sup>

Research has also demonstrated that those who react to mental stress with an excessive cardiovascular response are more likely to develop HPT in the future. Yoga practices are linked to decreased baseline catecholamine and cortisol release, decreased sympathetic activity, and increased parasympathetic activity. Further research demonstrates that yoga enhances autonomic stability in people with diabetes and hypertension.<sup>16</sup> There are many various yoga techniques that teachers and students have modified or personalized, but they all seem to share the practical application of mind-body integration, with the use of the breath as a focus for the relationship between body and mind.<sup>19</sup>

Yet, it is still unclear whether facets of yoga are more crucial for lowering blood pressure. It is challenging to develop therapeutic recommendations or prescriptions using yoga due to the diversity of yoga practices and the dearth of standardized research. The British Hypertension Society's guidelines acknowledge this challenge, saying that while

"interventions to reduce stress management, meditation, yoga, cognitive therapies, breathing exercises, and biofeedback have been shown to result in short-term reductions in BP," it is "difficult to be prescriptive with regard to an effective strategy" due to the wide variety of interventions studied.<sup>20</sup>

These recommendations therefore emphasize aerobic exercise, dietary control, weight loss, quitting smoking, consuming less alcohol, and salt restriction while ignoring yoga, meditation, or other methods of stress reduction, even though they stress the importance of lifestyle modifications for all hypertensive patients.<sup>21</sup>

## YOGIC MANAGEMENT OF AHARA AND VIHARA

**Ahar**-Yoga places a strong emphasis on the need of eating a balanced diet that includes plenty of fresh water, fresh food, green salads, sprouts, unrefined grains, and fresh fruits. It is crucial to understand the necessity of a satwica diet that is made and served with love and care.

**Vihar** - Choosing the right leisure activities to unwind the body and mind is crucial for overall health. This covers appropriate rest, keeping one's action-speech-thoughts silent, and participating in group activities where one loses their feeling of uniqueness. Karma Yoga is a great way to give up your feeling of individualism and embrace universality.

## CONCLUSION

It has been demonstrated that practising yoga can lower blood pressure in hypertensive people. As an additional treatment, yoga can help people use less antihypertensive drugs. Yoga appears to be most frequently employed as a spiritual and personal development path for certain medical issues, leading to the usage of a wide variety of yoga activities. As there aren't enough long-term research, consistent procedures, or sufficient meta-analyses to support any particular yoga practice for HPT, stress-reduction techniques like meditation and yoga have been left out of clinical HPT guidelines. If doctors cannot guarantee the effectiveness or appropriateness of certain yoga practices, they are hesitant to offer them to hypertensive patients. HPT has been successfully treated with yoga either on its own or in combination with medication. Yoga should be given more credence in the healthcare system so that it may be used in conjunction with traditional medical treatments. Future studies should emphasize standardized yoga practices, long-term follow-up, high-quality clinical trials, and knowledge of the mechanisms of action of various practices. Yoga's lifestyle components (healthy eating, exercise, relaxation, and a happy outlook) as well as the psychosomatic balancing effects of pranayama and yogic relaxation may be responsible for the majority of its health advantages. The restoration of physical, mental, emotional, and spiritual balance may be the main cause of the changes observed in all short- and long-term studies. According to tradition, yoga implies both the process and the attainment of a state of psychosomatic, harmony, and balance (samatvam yoga uchyate - Bhagavad Gita).

**CONFLICT OF INTEREST -NONE****SOURCE OF SUPPORT -NIL****REFERENCES**

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