

# Yoga Therapy in Pregnancy



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## Introduction

Yoga is becoming increasingly recognized and used in developed nations as a way to reach a healthier lifestyle as it as a variety of benefits: immunological, neuromuscular, psychological, and in pain control [1,2]. A possible reason for its popularity, is that yoga helps reducing stress, anxiety, depression, chronic pain syndromes (arthritis, chronic low back pain, migraine and other types of headache), and other chronic conditions such as hypertension and diabetes in adults [1]. However, there is little knowledge about the potential benefits, of yoga among the obstetric population. Additionally American College of Obstetricians and Gynecologists (ACOG) in the committee opinion entitled “Exercise during Pregnancy and the Postpartum Period” does not recognize prenatal yoga as an adequate class program in pregnancy [3]. According to ACOG, [4] exercise should be gold standard during pregnancy, to help reduce common symptoms during pregnancy such as backache, constipation, bloating, gestational diabetes, excessive weight gain and swelling. In 2002, ACOG released its latest recommendations on exercise, which encourages at least 30 minutes of moderate exercise each day on most, if not all, days of the week [3].

Pregnancy is a condition in which women undergo distinct physiological changes and increased stress and is accompanied by unique physical and psychological demands. There is a need to manage the various physical, emotional, mental, and pain symptoms that arise throughout the stages of pregnancy and labour [5]. Numerous prospective studies in both animals and humans indicate that high stress and mood disturbances during pregnancy are associated with a variety of negative maternal and infant outcomes [6,7] including low birth weight [7], preterm birth [8], spontaneous abortion [9], lower Apgar scores [10] more difficult labor and delivery [11,12], and postpartum

depression [13]. However, it does not exist any prevention treatment for mood and stress symptoms in the pregnant women population [14].

Yoga is useful to reduce anxiety in pregnant women, especially during labor, and can prevent depression [15]. In addition, it can reduce systolic and diastolic pressure in 3 to 4mmHg [16]. There are many types of yoga practice, it typically combines stretching exercises and a variety of poses with deep breathing, relaxation (yoga sleep), and meditation [17]. Yoga breathing exercises are capable of optimizing the capacity of the lungs to attract oxygen to be absorbed by the organs including delivering more oxygen and nutrients to the fetus [17]. In addition, yoga postures stimulate heart and diaphragm work, as well as the benefit of increasing stamina and endurance, strengthening the heart muscle. Prenatal yoga movements stimulate vagal and parasympathetic nervous system being capable of suppressing the sympathetic system that inhibits the adrenal medulla to release catecholamines (epinephrine and norepinephrine) [18]. The decrease in catecholamines causes vasodilation in the kidneys and almost all visceral organs, thereby lowering blood pressure and distributed blood volume in each minute [18]. On other hand, parasympathetic activation stimulates acetylcholine (ach) decreasing the amount of its impulse, which further slows the impulse to the ventricular muscle resulting in a decrease in blood pressure [19]. Yoga is a low impact, easily modifiable and mindful activity, which is considered a safe and sustainable activity for pregnant women.

## Conclusion

The findings in all these studies, show that yoga can be a good alternative for health professional to deal with anxiety during pregnancy, and adding prenatal yoga can improve the quality of maternal and fetal health.

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