

ROLE OF YOGA IN SAFE PREGNANCY- A CONCEPTUAL REVIEW**Sunita Acharya^{1*}, Pratibha Tripathi², Anita Acharya³ and Binod Kumar Singh⁴**¹PG Scholar, Ayurveda Campus, Institute of Medicine, Tribhuvan University, Nepal.²Assistant Professor, Department of Swasthavritta, Ayurveda Campus, Institute of Medicine, Tribhuvan University, Nepal.³Assistant Professor, School of Health and Allied Science, Pokhara University, Nepal.⁴Associate Professor & Head, Department of Kayachikitsa, Ayurveda Campus, Institute of Medicine, Tribhuvan University, Nepal.Article Received on
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Corresponding Author*Sunita Acharya**PG Scholar, Ayurveda
Campus, Institute of
Medicine, Tribhuvan
University, Nepal.**ABSTRACT**

Ayurveda is the science of life that explains various ways to prevent and cure diseases. Ayurveda lays out synchronization among body, mind and soul. *Yoga* is the art of living a happy life which is for the progress of our body, mind and soul. Ayurveda and *Yoga* are not merely same nor separate but related healing disciplines. Like Ayurveda *Yoga* has its significance in preventive, curative and rehabilitative health. *Asana* and *Pranayama* which are the component of *Astanga Yoga* are gaining global acceptance because of the benefits in preventive health. Pregnancy is a condition in which women undergo distinct physiological changes and stress and is accompanied

by unique physical and psychological demands. *Yoga* may have many benefits during pregnancy, including building pelvic strength and preparing body for labor. The study was planned to review the safe and unsafe *Yoga* practices in pregnancy. Review on *Yoga*, pregnancy and concept of *Yoga* in pregnancy was done and conclusion was drawn. *Yoga* practice is safe and beneficial in pregnancy. Certain *Yoga* and *Pranayama* practice help promoting the better health of pregnant woman and certain *Yoga Asana* are unsafe during pregnancy. The practice of *Yoga* should be judicious to get the additional benefits and prevent complications during pregnancy.

KEYWORD: *Yoga*, Pregnancy, Ayurveda, *Pranayam*, benefits, safe to practice.

INTRODUCTION

Ayurveda is the science of life that explains various ways to prevent and cure diseases. *Ayurveda* and *Yoga* are not merely same nor separate but related healing disciplines. Each has its unique place and function, but each overlaps into the other on various levels.^[1] *Yoga* is one of the most extra ordinary spiritual sciences that mankind has ever discovered. It is like a gem of great proportions, containing many facts whose light can illumine the whole of our lives with great meaning.^[2] *Yoga* is the science of right living and, such as, is intended to be incorporated in daily life. On a more practical level, *Yoga* is a means of balancing and harmonizing the body, mind and emotions.^[3] The word *Yoga* comes from the root word “*yuj*” which means union or to unite. *Yoga* can be simply defined as a means of uniting the individual consciousness with the universal consciousness. *Patanjali* defines *Yoga* as “*yogahcittavritti nirodha*”.^[4] *Yoga* is the art of living a happy life which is for the progress of our body, mind and soul. *Patanjali* gives the basic principle of *Yoga* to stop the fluctuations in mind.^[5] *Yoga* is essentially a spiritual disciple which is based on an extremely subtle science, which entirely focus to bring harmony between mind and body.^[6] *Yoga* has its significance in preventive, curative and rehabilitative health. *Asana* and *Pranayama* which are the component of *Astanga Yoga* are gaining global acceptance because of the benefits in preventive health.

The union of *Sukra*(sperm), *Aartava*(ovum)and *Aatma* or *Jiva* inside the *Kuksi*(uterus) is known as *Garbha*(zygote,embryo or fetus).^[7] Pregnancy is the time during which one or more offspring gestates inside a womens womb.^[8] Pregnancy is a condition in which women undergo distinct physiological changes and stress and is accompanied by unique physical and psychological demands. It is a process and series of changes that take place in a woman's organs and tissues as a result of a developing foetus.^[9] Pregnancy is divided into three trimesters of approximately three months each. The most common early signs and symptoms of pregnancy include missed period, tender & swollen breasts, nausea with or without vomiting, increased urination, fatigue, moodiness, bloating, cramping, constipation, food aversions.^[10] During the first trimester, the possibility of miscarriage (natural death of embryo or fetus) is at its highest. Around the middle of the second trimester, movement of the fetus may be felt. While the clinical diagnosis of pregnancy at times, becomes easy, but there are occasions where the diagnosis poses a problem. The enlargement of uterus caused by pregnancy may have to be differentiated from abdomino-pelvic swellings.^[11]

Yoga is intended to create a balance between emotional, mental, physical, and spiritual dimensions. Prenatal *yoga* is a type of *yoga* designed for pregnant women.^[12] *Yoga* has many benefits during pregnancy, including building pelvic strength and preparing body for labor. Pregnant body is simply not the same when carrying a developing child. Internal organs shift and squeeze together to make room for growing uterus. Additionally, the cocktail of hormones running through blood makes body feel and react much differently than usual.^[13] Both safety of the pregnant lady and the safety of her growing baby are important to consider when it comes to *yoga* practice. *Yogais* about helping to prepare for childbirth by relaxing the body and focusing on safe techniques and poses in all stages of pregnancy. Although *Yoga* is safe during pregnancy but there are some *Yoga* poses to avoid during pregnancy. Thus the review study is done with following Aim and objectives.

AIM AND OBJECTIVES

- 1) To study the effect of *Yoga* in pregnancy.
- 2) To review the safe and unsafe *Yoga* practices in pregnancy.
- 3) To assure the benefits of *Yoga* during different trimester of pregnancy.

MATERIAL AND METHOD

Regarding references on *Yoga* and pregnancy were collected from various classical *Yoga* and *Ayurveda* texts, published works, journals, internet sources, published Research papers from pubmed, Google scholar and compilation was done. Concept of *Yoga* in pregnancy was studied in detail.

EFFECTIVE ASANA IN DIFFERENT TRIMESTER

Practicing *yoga* during the pregnancy allows a pregnant lady to carve out valuable time for herself that she can use to get in touch with her body and emotions. She may also end up exploring the more subtle aspects of *yoga* relating to topics such as the chakras, meditation, or *yoga nidra*. Different *yoga/Asana* and *Pranayam* can be done in pregnancy. The pregnancy is a period of different changes divided in three trimesters and *Yoga* practice can be categorized depending upon the trimesters. *Yoga* can provide physical and mental benefits during pregnancy and post delivery. *yoga* practice is specific to each trimester. *Asana* are specific to practice and avoid during each trimester.^[14]

First Trimester

During the first trimester a pregnant lady may feel fatigued and sick. Doing *yoga* poses slowly and carefully will prevent her from feeling worse. *Yoga* can alleviate pregnancy symptoms like nausea and backaches. The *Yoga/Asana* that are safe and beneficial in 1st trimester are *Dandasana*(Staff pose), *Sukha asana*(Easy pose), *Savasana*(Corpse pose)^[15], *Janu Sirsasana*(Head to knee forward bend), *Upavistha Kanasana*(Wide –Angle seated forward bend), *Marjaryasana to Bitil asana*(Cat-cow pose).^[16] *Pranayam* which can be done in 1st trimester are *NadiSodhana Pranayam*, *Bhramari Pranayam*, *Sitali Pranayam*. Along with these *Asana* and *Pranayam*, *Dhyan* and *Mantrachanting* can be done.

Second Trimester

During the second trimester try to avoid belly poses and sharp twists. Inversions can compress lungs and cause severe discomfort. The *Yoga/Asana* that can be done in 2nd trimester are *Sukhaasana*(Easy pose), *Dandhasana*(Staff pose), *BadhaKodasana*(Butterfly pose), *Savasana*(Corpse pose), *Balasana*(Childs pose), *Triksonasana*(Triangle pose), *Uttanasana*(Standing forward bend). *Pranayam* which can be done in 2nd trimester are *Nadisodhana Pranayam*, *Sitali Pranayam*, *Ujjayi Pranayam*. *Dhyan* and *Mantra chanting* also can be done.

Third Trimester

During the third trimester pregnant lady may feel tired more often and her balance may be off-centered. *Yoga* during this time should focus on restorative and hip-opening poses. Light stretching will help ease her aches and pains. Avoid lying on back. Blocks and pillows can help her get into comfortable, safe positions. The *Yoga/ Asana* that can be done in 3rd trimester are *Sukhasana*(Easy pose), *Savasana*(Corpse pose), *Dandhasana*(staff pose), *Virabhadrasana II*(Warrior pose), *Malasana*(Garland pose), *Parsvasavanana*(Side corpse pose). *Pranayam* which can be done in 3rd trimester are *Nadisodhana Pranayam*, *Bhramaripranayam*, *Sitalipranayam*. *Dhyan* and *Mantra chanting* also can be done.

Certain *yoga* poses are to be avoided in pregnancy irrespective of the phase of pregnancy. The *Yoga/Asana* poses that are to be avoided during 1st trimester of pregnancy are: *Adho Mukha Vrksana*(Handstand pose), *Naukasana*(Boat pose), *Ardha Namaskar Parsvakonasana* (Half prayer twisting pose), *Ardha Chandrasana*(Half moon pose). *Yoga* poses which are avoided during 2nd trimester of pregnancy are: *Savasana*(Corpse pose), *Bhujangasana*(Cobra pose), *Urdhva dhanurasana*(Full wheel pose), *Shalabhasana*(Locust pose), *Matsyasana*(Fish

pose). Yoga poses which are avoided during third trimester of pregnancy are: Hot *yoga* (*Trikonasana*, *Ustrasana*, *Tadasana*, *Tuladandasana*), *Utkatasana*(chair pose), *Paschimottanasana* (Seated forward fold).^[17] Abdominal poses that require compression of the abdomen are not ideal. These can constrict the blood flow to the fetus and stretch the ligament too.^[18]

DISCUSSION

Prenatal *Yoga* is a type of *Yoga* designed for pregnant woman. Prenatal *Yoga* is about to help to prepare for child birth by relaxing the body and focusing on safe techniques and poses in all stages of pregnancy. *Yoga* can improve physical and psychological health not just for the duration of pregnancy but also before the pregnancy. Prenatal *Yoga* is a low-impact fitness routine that can help improve mood and sleep, increase strength and flexibility, and decrease lower back pain and other common symptoms of pregnancy.^[19] *Yoga* keeps mothers health in shape, tones muscles, and improve balance and circulation during pregnancy. The stretching and movements in *Yoga* help increase blood flow to heart. Improved blood flow means more oxygen-rich blood is going to baby. *Yoga* teaches how to breathe deeply and consciously relax. It helps to increase the vital capacity. Breathing technique practiced in *Yoga*, *Ujjayi* breathing helps to keep calm. When a person is in pain or afraid, body produces adrenaline and may produce less oxytocin, a hormone that makes labor progress. A regular *yoga* practice will help to resist the urge to tighten up when you feel pain. By practicing relaxation in *Yoga*, a pregnant lady will be equipped to handle stressful situations during delivery.^[20] Research studies suggest prenatal *Yoga* lowers chance of having pregnancy complications, pain and stress levels, and possibly other risks. Meditation and breathing exercises reduce pain and anxiety during labor. The combination of intentional movement and structured breathing can help alleviate symptoms of depression. Breathing in slow, rhythmic breaths activates the nervous system and blocks cortisol, which, in high amounts, has been linked to depression.^[21] Poses that put pressure on the abdomen, poses that deals with deep twists and lying on back at third trimester are to be avoided. Lying on back during pregnancy can be problematic if it puts pressure on the vena cava. The vena cava is body's largest vein that transport blood from your body's extremities back to heart. Normally, lying on back would not put excessive pressure on the vena cava, but a pregnant person has the weight of her unborn baby, placenta, and extra uterine fluid sitting right atop the vena cava if they lie on their back. This amount of pressure can decrease blood flow to the uterus and the brain, which could make her feel dizzy or even affect her baby.^[22] Extreme *Yoga* that heats the body can be sometimes dangerous because increasing heat

can cause neural tube defects. Twisting and bending should also be avoided. These movements can put off balance and increase risk of falling. Signs like sharp pain with certain movements, vaginal bleeding, or decreased fetal movement are warning sign which seek urgent medical consultation. During pregnancy, different types of GI problems like anorexia, indigestion, gastritis, nausea, vomiting etc may arise and for this one should take the proper and nutritious diet. Along this many psychological changes such as mood swing, psychological disturbances may be seen. For this there must be the emotional support. In *Hath Yoga* there is also the description about the nutritious diet during *Yoga* practice.^[23] During pregnancy diet should also be selected as per the need in respective trimester and *Yoga* practice.

CONCLUSION

Yoga practice is safe and beneficial in pregnancy. Certain *Yoga* and *Pranyama* practice help promoting the better health of pregnant woman and certain *Yoga Asana* are unsafe during pregnancy. The practice of *Yoga* should be judicious to get the additional benefits and prevent complications.

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