IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Raga Chikitsa (Music Therapy) In Pregnancy

Author: Dr. K. MOHANA SRUTHI KEERTHI, Final Year PG Scholar, Dept. of Prasuti Tantra evam Stree Roga, Dr.N.R.S Government Ayurvedic College, Vijayawada, AP.

GUIDE: Dr.R.VIJAYA SANTHA KUMARI, MD(Ayu) BHU.,P.G DIP.(YOGA)., Professor, Department of Prasuti Tantra evam Stree Roga, Dr.N.R.S Govt Ayurvedic College, Vijayawada,AP.

ABSTRACT:

Pregnancy is a unique physiological, psychological and spiritual process where maternal environment plays a decisive role in shaping fetal development. Ayurveda conceptualizes this through Garbha Samskara, a systemic approach for nurturing the fetus by regulating maternal diet, lifestyle, emotions and sensory inputs. Among all sensory modalities, sound (shabda) is regarded as the most powerful and subtle influence. Raga chikitsa, the therapeutic application of Indian classical music utilizes structured sound vibrations to harmonize the body, mind and consciousness. This article comprehensively explores the role of music therapy during pregnant state by integrating Ayurvedic principles with classical scriptural examples from the Vedas, Ramayana, Mahabharata and Bhagavatha and modern scientific evidence and establishes prenatal exposure to sattvika sound and Raga based music contributes significantly to maternal well-being and holistic fetal development.

KEY WORDS: Raga chikitsa, Music therapy in pregnancy, Maternal-Fetal bonding, Integrative prenatal care.

INTRODUCTION:

Ayurveda explains pregnant condition is not only merely the growth of a physical body but the creation of a complete human being, encompassing body (Sarira), mind (Manas), intellect (Buddhi) and consciousness (Atma). The fetus is considered sentient and responsive, capable of receiving impressions from the intra uterine environment. This understanding forms the foundation of Garbha samskara which emphasizes positive prenatal conditioning.

Among all prenatal influences, sound occupies a central position. Indian philosophy proclaims Nada Brahma - the universe itself is a sound. Music, especially Indian classical music structured as ragas, is not entertainment alone but a scientifically organized vibrational therapy. When applied therapeutically during pregnancy, it is termed as Raga chikitsa, functioning as safe, economical and non-invasive intervention.

AYURVEDIC AND PHYLOSOPHICAL BASIS OF SOUND

Shabda Tanmatra (subtle element of sound) arises from Akasha Mahabhuta, whose main quality is sound. The perception of sound occurs through the Srotrendriya (auditory sense organ), which develops during fetal life and is the earliest sensory systems to become functional.The Manovaha strotas, responsible for emotional and cognitive impressions, remain highly sensitive during gestation period.

Sound vibrations influence :

- Prana vayu – neural activity, respiration, vitality
- Udana vayu – cognition, memory, expression
- Satva Guna – clarity, calmness, emotional stability.

SCRIPTURAL FOUNDATION OF PRENATAL SOUND INFLUENCE VEDIC EVIDENCE

The Vedas present sound as the primordial creative force. The concept of Vak in the Rgveda describes sound as conscious and transformative. The Samaveda, entirely dedicated to musical chanting, clearly establishes that structured sound influences mind, emotions and spiritual evolution.

Vedic tradition advocated :

- Chanting during pregnancy
- Listening to melodious hymns
- Avoidance of harsh or disturbing sounds.

These practices were believed to enhance fetal intellect (Medha), emotional refinement and moral disposition.

Ramayana[1] : Prenatal sound and Sattvika progeny

In the Ramayana, Queen Kausalya, mother of Rama, is described as Soumanasya (maintaining a serene mental state), engaging in mantra chanting and surrounded by pleasant, harmonious sounds throughout her pregnancy. Rama's calm temperament, compassion, emotional balance and righteousness are traditionally attributed to this sound-centred prenatal environment, exemplifying Garbha samskara in practice.

Mahabharatha[2] : Intra uterine Learning

The Mahabharata provides clear evidence of intrauterine auditory learning through Abhimanyu. While in the womb, Abhimanyu listened to Arjuna explaining the strategy of entering the chakravyuha. This narrative confirms that the fetus can hear, comprehend and retain complex auditory information.

Prahlada[3] : Sound Transcending Genetic influence :

One of the most profound illustrations of prenatal auditory influence is the story of Prahlada from Bhagavatham. While still in the womb, Prahlada heard Narayana katha and spiritual discourses narrated by Sage Narada to his mother, Kayadhu. Despite being born to the demon king Hiranyakasipu, Prahlada born entirely free from demonic tendencies, embodying devotion, compassion and fearlessness.

These examples demonstrates that

- Prenatal auditory impressions shape moral and spiritual character.
- Sattvika sound can override adverse genetic and environmental factors.
- Consciousness in utero is receptive to higher knowledge.

Tansen and Raga Deepak

The legendary musician Miyan Tansen, one of the Navaratnas in the court of Akbar, is believed to have demonstrated the extraordinary power of music through **Raga Deepak**. According to tradition, when Tansen rendered this raga with perfect mastery, the atmosphere in the royal court became intensely heated and lamps that were unlit began to glow. The heat produced by the raga was so strong that Tansen himself suffered physical distress. To relieve this effect, his disciples later sang **Megh Malhar**, which cooled the environment with rainfall. This legend symbolizes the profound energetic influence attributed to ragas in Indian classical music.

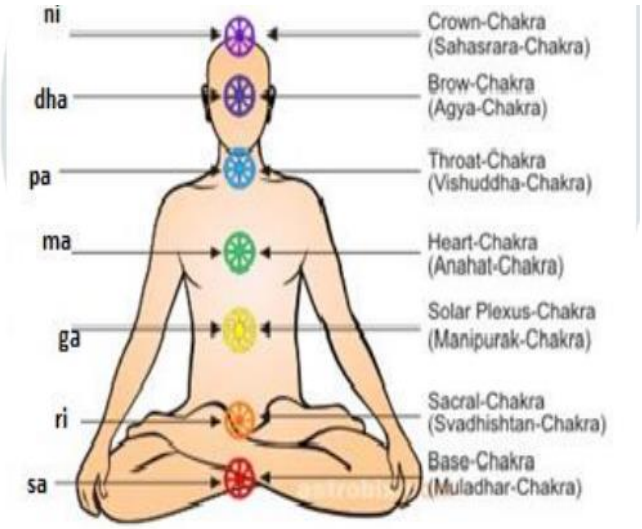
Story of Narayana Tirtha Tharangas :

The saint-composer Narayana Tirtha is believed to have suffered from severe abdominal pain during his spiritual travels. In deep devotion, he prayed to Lord Krishna and began composing and singing the devotional songs of Krishna Leela Tharangini, known as Tharangas. As he sang these compositions describing the divine plays of Krishna, his pain gradually subsided. This story is often cited as an example of the healing influence of music and devotional sound on the body and mind.

Relationship of Swara and Chakra[6] :

The raga is an arrangement of combination of swaras (seven basic notes in Indian Music namely Sa, Re, Ga, Ma, Pa, Dha, Ni). Musical swaras (notes) are believed to resonate with specific energy centres (chakras) of the body. Each chakra corresponds to certain emotional and physiological functions and particular swaras and ragas can stimulate or balance these centres through sound vibrations. Singing the

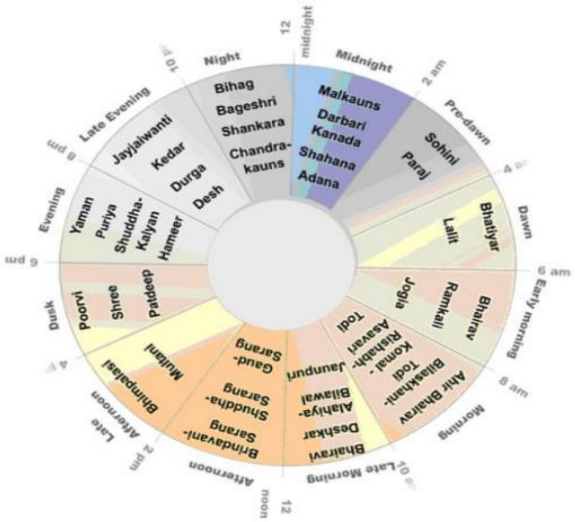
full scale, i.e., all the seven notes - both arohana (ascending order) and avarohana (descending order) activates all the chakras which is equivalent to doing a pranayama. According to Swarashastra, the 72 melakartha ragas are associated to the 72 vital nerves of our body. Veena (a South Indian String instrument) has a striking resemblance with human body and the 24 frets in the veena are compared to the 24 vertebrae in the body.



Time theory of Ragas[7]:

The time theory of Ragas is a distinctive principle of Indian classical music, particularly in the Hindustani tradition. According to this concept, each raga is assigned a specific period of day or night during which it is considered most effective and aesthetically powerful. This theory suggests that singing or listening to a raga at its prescribed time enhances its emotional and psychological impact.This time association is based on the melodic structure and tonal emphasis of the ragas, as well as natural rhythmic fluctuations in human physiology and mental states that occur over a 24 hour cycle.

Relationship between various Ragas and Time



Raga chikitsa in Pregnancy[8] – Trimester wise application

First trimester (0-12 weeks) : Supports emotional stability and reduces Nausea and Fear

Raga	Effect	Time
Bhairavi	Grounding, emotional stability; reduces nausea, fear, restlessness	Early morning (6 am - 8 am)
Todi	Anxiety reduction, its serious and Meditative tone, calms hyperactive thoughts and supports mental steadiness	Morning (8 am - 10 am)
Yaman	Calmness, improves sleep, balances cortisol levels & supports parasympathetic activation	Evening (6 pm - 8 pm)
Hamsadhwani	Joyful, positivity	Morning (6 am - 9 am)
Mohana	cheerfulness, lightness	Early morning

Second Trimester (13-28 weeks) : Enhances cognitive and emotional development**.**

Raga	Effect	Time
Kafi	Warmth, enhances maternal-fetal bonding	Evening (6 pm – 8 pm)
Bhageshri	Deep relaxation, improves sleep	Night (9 pm – 11 pm)
Malkauns	Promotes deep relaxation, beneficial for fetal neural development	Late night
Desh	Emotional warmth	Late evening (8 pm – 10 pm)
Brindavani Sarangi	Refreshing joy	Afternoon (12 pm – 2 pm)
Kalyani	Supports cognitive and emotional growth to fetus	Evening
Khamas	Enhances joyful and affectionate feelings, Reduces stress and anxiety	Evening

Third Trimester (29-40 weeks) : Prepares psychologically for child birth.

Raga	Effect	Time
Darbari Kanada	Deep grounding, fear reduction, reduces labor anxiety	Late night
Ananda Bhairavi	Confidence, devotion	Early morning
Shankarabharanam	Strength, clarity, balanced breathing pattern	Morning
Tilak Kamod	Emotional fulfillment	Evening
Sindhu Bhairavi	Reduces emotional tension	Any time
Madhyamavati	Peaceful conclusion, promotes serenity before delivery	Evening

Some other Carnatic Ragas useful in Pregnancy

Raga	Effect	Time
Shankarabharanam	Mental balance and tranquility, maintains blood pressure	Morning
Charukesi	Deep emotional soothing, reduces anxiety and tension	Evening
Hindolam	Meditative, calming effect, lowers sympathetic activity and stress	Night
Nilambari	Classical lullaby raga, promotes deep sleep	Night
Yadukula Kambhoji	Soft calming melody, helps in restful sleep	Night
Malahari	Mental calmness, grounding effect, reduces stress	Early morning
Sudha Dhanyasi	Gentle meditative effect, positive emotional environment	Evening

MODERN SCIENTIFIC CORRELATION :

Modern research validates ancient insights. The fetal auditory system becomes functional by 18-20 weeks of gestation. Fetuses respond to music through changes in heart rate and movement[4] and show postnatal recognition of familiar sounds. Maternal music exposure reduces cortisol, increases oxytocin, and enhances Parasympathetic activity[5], creating an optimal intrauterine environment for fetal brain development.

Raga chikitsa influence both the neurophysiological and psychological systems of the body. The sound vibrations produced by music stimulate the auditory system and subsequently affect the Autonomic Nervous System, particularly the Vagus nerve, leading to emotional and physiological regulation[9].

Auditory Reception and Neural Transmission[10] :

Sound waves

↓

enter external ear

↓

travel through auditory canal to vibrate tympanic membrane

↓

These vibrations transmitted through the ossicles (malleus, incus, stapes) to the cochlea of the inner ear

↓

Inside cochlea hair cells of organ of corti convert mechanical vibrations into electrical nerve impulse

↓

These impulses travel through the auditory nerve (VIII cranial nerve) to the brainstem, thalamus and auditory cortex.

Effect : The auditory cortex processes pitch, rhythm and melody of the ragas which then interacts with emotional centres of the brain.

Limbic Systems Activation (Emotional processing)[11]

From auditory cortex, signals reach the limbic system (Amygdala, hippocampus, hypothalamus).

Functions :

Amygdala – emotional interpretation of music
Hippocampus – memory and associative feelings
Hypothalamus – Autonomic and endocrine responses

Effect : This leads to changes in emotional states such as calmness, joy, relaxation or reduction of anxiety.

Vagus nerve stimulation[12] :

Certain musical elements such as slow tempo, smooth rhythm and harmonious melody stimulate the parasympathetic Nervous systems mainly via vagus nerve (cranial nerve X).

Mechanism :

- Auditory signals influences the brainstem autonomic centres
- These centres regulate vagal activity
- Increased vagal tone activates parasympathetic responses.

Physiological effects :

- Reduces heart rate
- Decrease in Blood pressure
- Improved Digestion
- Relaxation
- Reduction in stress hormone (cortisol)

Thus listening to soothing ragas enhances vagal tone, promoting physiological calmness.

Neurochemical changes[13]

Music stimulates release of several neurotransmitters.

Dopamine – pleasure and relaxation

Serotonin – mood stabilization

Endorphins – Natural pain relief and well being

Oxytocin – emotional bonding and comfort.

These biochemical changes contribute to mood elevation and emotional balance.

Brain wave Entrainment[14]

Different ragas and musical rhythms can influence brain wave patterns.

- Alpha waves (8-12 Hz) - relaxation and calmness
- Theta waves (4-8 Hz) - deep relaxation and creativity.
- Delta (0.5–4 Hz) – deep dreamless sleep.

Slow and melodious ragas promote Alpha brain waves which help reduce stress and anxiety.

RESULTS :

Effects on Fetus

- Enhanced auditory discrimination
- Better emotional regulation
- Improved sleep cycles
- Stronger bonding
- Satvika temperament
- Improved adaptability

Effects on Mother

- Reduced anxiety and depression
- Reduced cortisol
- Smoother labor
- Reduced Post Partum Depression Risk

Practical Daily Garbha samskara Music Routine :

- 15-20 minutes each session
- Soft volume
- Comfortable posture
- Gentle abdominal touch
- Combine with affirmations and bonding.

CONCLUSION :

Raga chikitsa integrated with Garbha samskara represents a complete prenatal and intrapartum care system, deeply rooted in Ayurvedic philosophy, validated through scripture and supported by modern science. From Prahlada's spiritual purity to Abhimanyu's intra uterine learning, ancient narratives confirm that prenatal sound shapes destiny.

According to Pancha panchaka siddhanta, shabda is the specific attribute of Akasa Mahabhuta. When manifested as music, it is perceived through srotrendriya, processed by Manas and ultimately reaches the Atma. This harmonious sensory pathway produces prasannata (inner cheerfulness) of Atma, Indriya and Manas in the pregnant woman. Such a positive mental state favorably influences the fetus in utero and helps cultivate sreshta samskara, contributing to the development of a balanced and sattvika child. Structured raga exposure during pregnancy enhances maternal well-being, fetal neuro development, emotional stability and smooth labor.

Joyful, calming and devotional ragas together create a harmonious prenatal sound environment that nurtures emotional security. Therefore music therapy in pregnancy is not merely aesthetic; it is developmental, therapeutic and transformative in shaping both maternal experience and the emerging personality of the child.

REFERENCES:

1. Srimad Bhagavata Mahapurana, Translations by his Divine Grace A.C. Bhaktivedanta Swami Prabhupada, SB 7.7: What Prahlada Learned in the Womb, Pg 569.
2. Valmiki Ramayana, Bala Kanda, Sarga 18–20.
3. Mahabharata, Adi Parva, Section 122–123.
4. Chorna O, Filippa M, De Almeida JS, Lordier L, Monaci MG, Hüppi P, Grandjean D, Guzzetta A. Neuroprocessing Mechanisms of Music during Fetal and Neonatal Development: A Role in Neuroplasticity and Neurodevelopment. Neural Plast. 2019 Mar 20;2019:3972918. doi: 10.1155/2019/3972918. PMID: 31015828; PMCID: PMC6446122.
5. Erin Fang, The Effect of Music Therapy on Pregnant Women
6. https://devotionalmusic.wordpress.com

7. Hindusthani Ragas,The concept of Time and Season by Vijay Bazaz Razdan, B.R. Publishing Corporation, Pg 48.
8. Joyanta Sarkar, Utpal Biswas "An effect of Raga Therapy on our human body". International Journal of Humanities and Social Science Research, Volume 1, Issue 1, 2015, Pages 40-43
9. Biplab Munshi, Raga Therapy: A Complementary Approach to Disease Management Through Indian Classical Music, Pg 3.
10. Dr Rahul Bagla ENT Textbook, Physiology of Hearing : from Sound waves to Neural Perception.
11. Toader C, Tataru CP, Florian IA, Covache-Busuioc RA, Bratu BG, Glavan LA, Bordeianu A, Dumitrascu DI, Ciurea AV. Cognitive Crescendo: How Music Shapes the Brain's Structure and Function. Brain Sci. 2023 Sep 29;13(10):1390. doi: 10.3390/brainsci13101390. Erratum in: Brain Sci. 2024 Apr 09;14(4):365. doi: 10.3390/brainsci14040365. PMID: 37891759; PMCID: PMC10605363.
12. Yu Liu , Kyra Bi , Sierra Hodges, Jian Kong, Harmonious Healing: Advances in Music Therapy and other Alternative Therapy for Depression and Beyond.
13. Mona Lisa Chanda and Daniel J. Levitin, The neurochemistry of music, Trends in cognitive sciences, April 2013, vol.17, Pg 179.
14. A Sadek R, Khalifa AA, Elfattah MMA. Deep learning Binary/Multi classification for music's brainwave entrainment beats. PeerJ Comput Sci. 2023 Nov 3;9:e1642. doi: 10.7717/peerj-cs.1642. PMID: 38077584; PMCID: PMC10703030.