



ROLE OF MUSIC IN PRE-NATAL AND POST-NATAL DEVELOPMENT OF CHILD

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Abstract

Music is an integral part of Indian culture and society. During the whole life span of a human being music plays a vital role in every occasion from birth till death. Listening to healing music has numerous effects on the Garbh and use of healing music is one of the most significant element of Garbh Sanskar. Evidence suggests that music therapy is beneficial for all individuals both physically and mentally. It improves the mental, physical, emotional and social abilities of child. Listening to music during pregnancy will not only have a soothing and uplifting effect on the pregnant women but also a positive effect on the unborn child. It is a welcome addition to baby's sleep routine. Music at early age helps children express themselves and share feeling. Even at an early age, they can sway, bounce and move their hands in response to music they hear. Meaningful engagements in general and listening to special kind of music can play a very significant role in healthy neurological development during pregnancy. This articles aims at shedding some light on the effect of music during and after pregnancy.

Keywords: garbh sanskar, music therapy, pregnancy, womb, veena, anxiety, sapta swara, nava rasa, tridosha, kaal, samanta.

Methodology: A descriptive and analytical method have been used to prepare this research article. Various articles, papers and books on music, therapy, prenatal care etc. of Indian as well as foreign scholars are studied to draw the conclusion on effect of music in the overall development of child during and after pregnancy.

INTRODUCTION

Music is a universal and cultural aspect of all human beings. It is a combination of elements like melody, harmony, rhythm and Timber. It is an art of arranging different sounds in time to produce a composition. Music is an integral part of people's way of life as it plays a key role in religious rituals, ceremonies (like marriage engagement birth-death etc.) festivals, social and cultural activities or just simply a way to celebrate life.

Talking about Indian music, India is a country of diversity, thus its music encompasses numerous genres in various varieties and forms that include classical, folk, bollywood, pop, ghazals, instrumental music, bhajans etc

Indian music system is unique because of thousands of ragas, tunes to its credit. These tunes are based upon certain permutations and combinations of sapta swaras or seven notes which derive their base on navrasa (9 human emotions). Rasa has been understood as essence, aesthetic experience of a sentiment. The quality of inducing

human emotions and elevating human self to experience the eternal joy and bliss make Indian music therapeutic and spiritually evolving.(IMTA, 2018) (1)

MUSIC THERAPY

Music therapy is a systematic process of intervention. Therapists use music based experiences to address patient's needs in one or more domains of human functioning like cognitive, academic, emotional, psychological, behavioural, communication, social, physiological (sensory, motor, pain, neurological and other physical systems), spiritual, aesthetics.(2) Music experiences are strategically designed to utilise the elements of music for therapeutic effects including melody, harmony, key, mode, meter, rhythm, pitch, range, duration, timbre, form, texture and instrumentation.(3)

One study found that children who listened to music while having IV inserted into their arms showed less distress and felt less pain than the children who did not listen to music while having an IV inserted.(4)

Evidence suggests that music therapy is beneficial for all individuals both physically and mentally. Benefits of music therapy include improved heart rates, reduced anxiety, stimulation of the brain and improved learning. Music therapy therapists use this techniques to help their patients in many areas ranging from stress relief before and after surgeries to neuropathology like Alzheimer's disease. Studies on patients diagnosed with mental health disorders such as anxiety, depression and schizophrenia have shown visible improvement in their mental health after music therapy.(5)

The National institute for health and care excellence (NICE) have claimed that music therapy is an effective method in helping individuals experiencing mental health issues and more should be done to offer those in need of this type of health.

PREGNANCY AND MUSIC

Pregnancy is an overwhelming, awe- inspiring and a genuinely gratifying experience. A woman goes through a lot of changes physically, emotionally and psychologically during those 40 weeks and also after childbirth. One of the most helpful and effective ways for a mother to stay happy and stress-free is by listening to music. Research in in neurological functioning supports the association between music and emotion, both of which are processed in the right hemisphere of the brain.(Schore,1994)(6)

Listening to healing music has numerous effects on the garbh and the use of healing music is one of the most important elements of garbh sanskar. For healthy neurological development during pregnancy listening to special kind of music can play a very significant role. The human brain is ingrained with music abilities and shaped by musical experience starting in utero and continuing across the lifespan.



According to Dr. Balaji Tambe, an ayurvedic physician, the use of healing music is the most important aspect of garbh sanskar it is well known that music or sound vibrations reaches the baby in the womb. It has a soul and recognises values. The baby can be cultured, especially through certain mantras and music found in Indian tradition. After childbirth this music serves to calm the child. Babies find it enjoyable and are able to sleep comfortably with its help." According to him the sound of Veena (Indian string instrument held by goddess Saraswati), flute and Samved mantras give health to the pregnant women and the child within. It is possible to give energy for the development of mind, body and soul of the child in the womb by listening to special music.

Veena has a structured interface with human body which has been established in neurological research. It establishes a relationship between its generation of a music note and its resonating response in human body. Veena is also called the 'mother of instruments' because it was the first instrument originated.

GARBH SANSKAR

Out of 16 Sanskar, Garbh Sanskar is an Indian traditional practice which literally means education in womb. It aims at influencing the developing foetus positively.(Sundar & Parmar)(7) An Indian traditional perspective suggests that low frequency chants can be used for stimulation of auditory system to pregnant women from second trimester onwards.

When a pregnant woman chants, it is believed that this practice manipulates the micro environment in the uterus. Chanting provides health benefits to both women and her developing foetus. (Sundar, 2015)(8)

Since ancient times it has been believed that the child in the womb adopts impressions from its surroundings and the behaviour of its mother, and learning of all kinds starts taking place. Modern science has further confirmed it. Meaningful engagement with music has many effects on garbh and the listening to healing music is one of the most important aspects of garbh sanskar.

The Indian ragas were designed to regulate the working of the tridosha as per their sthana (place), Kaal (time) and Samanta for the betterment of the health. Also it has been observed that musical regulation leads to better physical, psychological, intellectual and spiritual development of the child. Further, it has been indicated that children who receive music therapy during pregnancy have a better healthy life with less disease exposure, high level of IQ and EQ, they could cope with stress in a better way and even learn facts faster than others. The famous British violinist Menishin,

believed that his own musical talent was partly due to the fact that his parents were always singing and playing music before he was born.(Tewari, 2011)(9)

MUSIC AND CHILD DEVELOPMENT

Listening to music during pregnancy will not only have a soothing and uplifting effect on the pregnant woman but also a positive influence on the unborn child. Around 16 to 18 weeks of pregnancy the little one hears its very first sound. By 24 weeks, the little ears start to develop rapidly and babies have been shown to turn their heads in response to voices and noise. In the last few months of pregnancy, an unborn baby can recognise it's mother's voice, native language, word patterns and rhymes.

Music ignites all areas of child development and skills for school readiness, particularly in areas of language acquisition and reading skills. Learning to play a musical instrument can improve mathematical learning and even increase school scores.

Music inspires emotions, so music can be a popular recommendation to soothe the little one peacefully. It is a welcome addition to babies sleep routine. The music must be soft, soothing, relaxing to create a calm atmosphere to nurture their sleeping pattern. A familiar tune or music or song becomes like a session of music therapy. Slow, soft, repetitive music will actually slow down the heartbeat and allows for calmer and deeper breathing.

Listening to music or playing it with other people makes one feel connected to others around him. There are several mechanism through which music impacts one's ability to connect with one another by impacting brain circuits involved in empathy, trust and cooperation, perhaps explaining how it has survived in every culture of the world.

Music at early age helps children express themselves and share feelings. Even at an early age, they can sway, bounce and move their hands in response to music they hear. They learn to laugh, repeat words and it encourages them to use these words and memorize them.(10)

MUSIC ENSURES HEALTHY NEUROLOGICAL DEVELOPMENT

Meaningful engagements in general and listening to special kind of music can play a very significant role in healthy neurological development during Garbh. Neural processing of musical elements in human brain is extremely complex and it involves widespread bilateral network of cortical and sub cortical areas which integrates several perpetual, cognitive sensory - motor and emotional functions.(11) To a certain extent the mechanism underlying music processing can be explained by simple sound

processing however, perception of music is more than the sum of its basic acoustic features or musical elements. In addition to auditory signal transduction, perception of music triggers a series of perpetual cognitive motor and emotional processes which involve various brain areas unilaterally (for example, pitch and melody processing are more lateralized to the right hemisphere) as well as bilaterally which involves variety of "musical sub functions".(12)

The developing nervous system in utero is exposed to myriad internal as well as external influences with potentially far fetching consequences. Most of the researches examining these areas are directed towards understanding the adverse effects and their structural or functional pathogenesis.(13) However, it is also interesting to examine whether fetal neurological development can be positively influenced or enhanced in an analogous manner. It is evident in previous research that appropriate vibroacoustic stimulation by musical exposure can alter foetus behaviour and can be carried forward to the newborn period.(14)

Al-Qahtani (2005) examined if fetal responses to music differs from that to human voice. Total 10 healthy - term foetuses were exposed to music, voice, and Sham randomly for three 15 - second intervals. Finding suggested that foetuses responded by increased fetal heart rate (FHR) and motor response to both music and voice which was significantly different from Sham exposure but not different between them.

CONCLUSION

It has been universally accepted that music is a non invasive and a culturally accepted intervention which has multiple direct and indirect beneficial effects on mother and her foetus through both the pregnancy and prenatal period.

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