



A CONCEPT OF MIND ACCORDING TO *AYURVEDA* AND USE OF INDIAN MUSIC THERAPY AS A NON- PHARMACEUTICAL WAY OF PROMOTING MENTAL HEALTH

Dr. Ritesh Damle^{1*}, Dr. Dnyaneshwar Padavi²

^{1*}M.D. Ayurved (Kayachikitsa),

- Ph.D. (scholar) - Kayachikitsa dept., School of Ayurveda, D.Y. Patil's deemed to be university, Navi Mumbai, India.

- Dip. In emergency medical services, Ruby hall clinic, Pune, India,

- Sangeet Tabla Visharada (equ. To B.A. Music),

- Certificate course in Music Therapy: Year of passing – 2022, Symbiosis Skills and Professional University, Approved by U.G.C.

- Music Therapy (Basic to advance): Year of passing – 2023

Educational board of vocational training and research, Government of India

- Assistant professor, Kayachikitsa dept. At Sumatibhai Shah Ayurved Mahavidyalaya, Hadapsar, Malwadi, Pune, India Email: rritesh126@gmail.com Mob.: 8830049499

²- Ph.D. Ayurveda, H.O.D. Kayachikitsa dept. School of Ayurveda, D.Y. Patil's deemed to be university, Navi Mumbai, India

***Corresponding Author: Dr. Ritesh Damle**

*Assistant professor, Kayachikitsa dept. At Sumatibhai Shah Ayurved Mahavidyalaya, Hadapsar, Malwadi, Pune, India Email: rritesh126@gmail.com Mob.: 8830049499

Satwa, Raja, Tama are three main properties of mind. Out of these, *Satwa* is a Guna and *Raja* and *Tama* are described as *Manodosha*. i.e. they are bad properties when get dominant. These *Raja* and *Tama* properties lead to *Mano Vikar* that are: *Kama, krodha, Lobha, Moha, Shoka, Harsha, Chinta, Udwega, Bhaya* etc.¹

Function of Mana or Mind explained in 5 categories. *Chintya, Vicharya, Oohyam, Dhyeyam, Sankalp*. In *Charak Samhita Sutrashtana- Tisrishaniya adhyay*, we get very precise description of *Manas hetu* or cause of stress.²

It is hard to dispute that most of us live at very fast speed. Stress is a feeling that is created when one reacts to an event. It is a body's way of rising to a challenge and preparing to meet a tough situation with focus, strength and stamina. Such an event that provokes stress is known as stressor.

People who are anxious and under pressure are nothing but under stress. Firstly, most of the time such people may show a symptom 'loss of appetite' in other words, it causes *Agnimandya*. In such anxious state, people reach for not so healthy and easily available food like Junk food. This can take a form of chocolates or sweets often in between meal. Intake of alcohol or smoking may also be seen.

Here, one can realise that most of the time, stress is the root cause for improper *Aahar Vidhi vidhan*, changing life style and food habits. Stress factor is same but it comes to you with different faces. It is always a challenge for a doctor or councillor to identify the same. Many people who are under stress turn to food as a source of comfort. Over the period of time, it causes *Rasavaha srotas dushti*. The

term chintyanam ati chintanat is well explained in Charak samhita viman sthaan. *Avyayam* and *Diwaaswapna* are commonly seen in people who are under stress.³

Although there are many pharmacological ways of treating psychological disorders but, they also induce serious side effects. Hence, pharmacological treatment especially for mental disorders cannot be a long-term solution.

Ayurveda recognizes that each person has a unique mind-body constitution or Prakriti, influenced by their inherent balance of doshas and other factors. Therefore, mental health interventions in Ayurveda are tailored to individual needs, considering their specific constitution, imbalances, and predispositions.

Indian music therapy is an ancient system of healing that uses the power of music to promote physical, mental, and emotional well-being.

The Raga system of Indian classical music is believed to have therapeutic properties and is often used in music therapy. A Raga is a specific melodic framework that provides a structure for improvisation in Indian classical music. It is composed of a specific set of notes, scales, and melodic patterns that evoke specific emotions and feelings.

Indian music is emotional and intellectual. The unique merger of Swaras (Musical note) and their partials and mathematically precise Laya and Tala systems, lend the music its intuitive as well as intellectual flavour respectively.

In this context, the brain scientists have made significant contributions towards the relevance of music therapy as a medical intervention. Their research has discussed the relevance of music in hemispheric lateralization. These research works suggest that the speech centre is in the left hemisphere of the brain and expressivity in the right one. In comparison of musicians with non-musicians, it is shown that musically trained persons listen to music with a left hemisphere basis, while non-musicians listen with a right hemisphere orientation. There is yet another suggestion that music processing is done in both hemispheres.

Also, according to Ayurveda, individuals having Meda Dhatu Sarata and Majja Dhatu Sarata can show great tone of Voice.^(4,5,6) This is mostly a qualitative analysis, well described in various aspects. It is a well-known fact that Indian classical music attaches great importance to serenity and a thoughtful state of mind as its primary goal. As much, it helps in balancing the left and right hemispheres of the brain, which are assigned the functions of analysis and intuition respectively by the neurologists.

Music and its clinical effects:

Music therapy has the unique ability to promote neuroplasticity through the increase of dopamine production, the synchrony of neural firing, and the production of a clear signal. Much of what is taught and inherently known in music therapy has roots in neuroplasticity. Music therapists are taught to pair non-music tasks/behaviour with music. This is a basic principle of neuroplasticity, but now there is more research supporting music as a rich neuroplasticity tool. What makes music therapy work, though, is the ability of music therapists to know how to use/manipulate music to shape the neural responses that underlie client/patient behaviour.

Music and Dopaminergic Functions

How can we feel happiness or sadness when we listen to music? Scientifically, the dorsal and ventral striatum release dopamine when listening to pleasurable music. The activity in these structures is known to associate with the reward system of the human brain.^(14,15) Moreover, the striatum interacts with cortical mechanisms involved in the perception and valuation of musical stimuli. In detail, listening to music stimulates the nigrostriatal dopaminergic system, as well as the nucleus accumbens and ventral tegmental area in the mesolimbic pathway.^[12,13] Additionally, listening to pleasurable music facilitates neuroplasticity, as well as movement, breathing, and heart rate, indicating the immense potential of music in the therapy for dementia and movement disorders, including Alzheimer's disease and Parkinson's disease.

The combination of medical therapeutics and listening to music, singing songs as well as playing instruments can improve not only the motor function, but also the emotional and cognitive system. ⁽⁷⁻¹⁰⁾

In music therapy, different Ragas are used to address specific health conditions and emotional states. For example, certain Ragas are believed to have a calming and soothing effect, while others are thought to have an energizing and uplifting effect. The use of different Ragas in music therapy sessions is based on the principle that each Raga has a unique energy and that this energy can be used to address specific health concerns.

Additionally, the improvisation and melodic patterns of Raga in Indian classical music can be used to address emotional states and improve mental health by promoting relaxation and reducing stress, it is often used in conjunction with other therapies such as Yoga and meditation. ⁽¹⁶⁾

It is important to note that the effectiveness of music therapy using Raga system or any other system, is not fully scientific, but it is a traditional practice that is believed to be beneficial by many practitioners and people who have experienced it.

Ayurveda views the mind as a dynamic entity influenced by the interplay of various factors, including Dosha balance, Gunas, Dhatu Sarata and individual constitution. By fostering mental harmony and addressing imbalances through holistic interventions, Ayurveda aims to promote psychological well-being and overall health.

Incorporating classical Indian music therapy into clinical practice requires sensitivity to individual preferences and cultural backgrounds. By harnessing the therapeutic potential of classical compositions, healthcare professionals can create customized interventions that address the unique needs of their patients, promoting holistic healing and well-being.

References:

1. Agnivesha:Charaka samhitha,Edited by Acharya Jadavji Trikamji,Published by Choukambha publication,Varanasi,2017; Vimna Sthana chapter 6. Shloka no. 6
2. Agnivesha:Charaka samhitha,Edited by Acharya Jadavji Trikamji,Published by Choukambha publication,Varanasi,2017; Sutra Sthana chapter 11, Shloka no. 45
3. Agnivesha:Charaka samhitha,Edited by Acharya Jadavji Trikamji,Published by Choukambha publication,Varanasi,2017;7/30. Vimanasthana Chapter 5, Shloka no. 13
4. Agnivesha:Charaka samhitha,Edited by Acharya Jadavji Trikamji,Published by Choukambha publication,Varanasi,2017;7/30. Vimanasthana Chapter 8, Shloka no. 106
5. Agnivesha:Charaka samhitha,Edited by Acharya Jadavji Trikamji,Published by Choukambha publication,Varanasi,2017;7/30. Vimanasthana Chapter 8, Shloka no. 108
6. Agnivesha:Charaka samhitha,Edited by Acharya Jadavji Trikamji,Published by Choukambha publication,Varanasi,2017;7/30. Vimanasthana Chapter 8, Shloka no. 109
7. Duarte A, Henson RN, Knight RT, Emery T, Graham KS (2010) Orbito-frontal cortex is necessary for temporal context memory. *J Cogn Neurosci* 22: 1819-1831. [Crossref]
8. Paulmann S, Seifert S, Kotz SA (2010) Orbito-frontal lesions cause impairment during late but not early emotional prosodic processing. *Soc Neurosci* 5: 59-75. [Crossref]
9. Muller V, Lindenberger U (2011) Cardiac and respiratory patterns synchronize between persons during choir singing. *PLoS One* 6: e24893. [Crossref]
10. Miendlarzewska EA, Trost WJ (2014) How musical training affects cognitive development: rhythm, reward and other modulating variables. *Front Neurosci* 7: 279.
11. Menon V, Levitin DJ (2005) The rewards of music listening: response and physiological connectivity of the mesolimbic system. *Neuroimage* 28: 175-184. [Crossref]
12. Salimpoor VN, Benovoy M, Larcher K, Dagher A, Zatorre RJ (2011) Anatomically distinct dopamine release during anticipation and experience of peak emotion to music. *Nat Neurosci* 14: 257-262.
13. Koelsch S, Fritz T, DY VC, Muller K, Friederici AD (2006) Investigating emotion with music: an fMRI study. *Hum Brain Mapp* 27: 239-250. [Crossref]

14. Berridge KC, Robinson TE (1998) What is the role of dopamine in reward: hedonic impact, reward learning, or incentive salience? *Brain Res Brain Res Rev* 28: 309-369. [Crossref]
15. Ferreri L, Mas Herrero E, Zatorre RJ, Ripolles P, Gomez Andres A et al. (2019) Dopamine modulates the reward experiences elicited by music. *Proc Natl Acad Sci U S A* 116: 3793-3798. [Crossref]
16. Goupil L, Aucouturier JJ (2019) Musical pleasure and musical emotions. *Proc Natl Acad Sci U S A* 116: 3364-3366.