

THERAPEUTIC EFFECTS OF HINDUSTANI CLASSICAL MUSIC WITH REFERENCE TO RAGA DARBARI KANADA, RAGA BAGESHREE AND RAGA MALKAUNS

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Abstract

The classical music originated in the northern parts of India is popularly known as Hindustani Classical Music, and is an integral part of the culture of India. The central notion of this classical music is Raga, performed in different rhythm or Tala, vocally or through different musical instruments. All the Ragas have their own grammatical periphery consisting of a group of Swaras or Notes. Right from the ancient times of the legendary classical music exponent Tansen, Indian history has witnessed various miraculous influence of Classical music on the human body, mind and soul. The exposure to a Raga can induce a sense of well-being both in the physical and mental aspects of a person leading to a promising healthcare practice called Music Therapy or Raga Therapy.

In this article, out of the 83 well-defined Ragas of the Hindustani Classical Music, the therapeutic effects of three prominent Ragas, namely Raga Darbari Kanada, Raga Bageshree and Raga Malkauns, are discussed in detail. All the selected Ragas fall into the midnight to late night Raga time cycle, but have different Thaats of origin (Asavari, Kaafi and Bhairavi). The therapeutic effects discussed in this article are from Allopathic, Psychiatric as well as Ayurvedic School of medical practice.

Keywords: Raga, Hindustani Classical Music, Thaat, Swara, Music Therapy

1. INTRODUCTION

Indian classical music is considered to be one of the oldest musical traditions in the world. Indian music can be divided into two broad categories classical and popular. Classical music has two main variants, Hindustani classical music prevalent largely in north and central India and Carnatic classical music prevalent largely in the south of India. Each variety has multiple genres. For example, Hindustani music has Dhrupad, Khayal, Tarana as classical genres and Thumri, Dadra, Tappa, Bhajan as semi-classical genres - amongst others (Agarwal et al, 2013). At the base of classical and semi-classical Indian music is a raga(s), which is described as a mood or sentiment expressed by a microtonal scale form ("Raga" britannica.com/EBchecked/topic/489518). Indian classical music is based on melody without the presence of any major harmonic structure. It has seven basic notes with five interspersed half- notes, resulting in a 12- note scale. In Indian music, any frequency can be set as the base frequency, known as swara (note) 'Sa' with other notes taking frequency values following their fixed ratios with respect to Sa. Indian classical music has two important characteristics- raga (melodic aspect of music) and Taal (cycle of fixed number of beats repeated over and over (Agarwal, 2013).

1.1 ORIGIN OF HINDUSTANI CLASSICAL MUSIC

SWARA

The origin of the seven basic notes are believed to be as follows:

"Sa" (Shadja): Derived from the sounds produced by the cry of a peacock. "Re" (Rishabh): Derived from sounds produced by cow when her calf is separated from her.

"Ga" (Gandhar): Derived from the bleating of goats in a flock.

"Ma" (Madhyam): Derived from the call of the deer.

"Pa" (Pancham): Derived from the call of cuckoo during the spring season.

"Dha" (Dhaivat): Derived from the neighing of horse.

"Ni" (Nishad): Trumpeting of an elephant is the inspiration for this note.

Out of these notes, "Sa" and "Pa" are known as fixed notes (Shuddha Swara) while other notes can vary the places creating one additional note each (Vikruta Swara). Hence, total twelve music notes are there. If the frequency of a given note is more than its mean value, then it is termed to be a Teevra swara. Similarly, if it is decreased below the mean value, then it is called Komal swar (Desai et al, 2021). Around 1900, Pandit V.N. Bhatkande and Mr. V.D. Paluskar had systematically organized the structure of music in the form of book, Hindustani Sangeet Paddhati Kramik Pustak Malika. This book shows the development of Raga, originated from systematic sequence of notes, known as "Thaat". Pandit V.N Bhatkande and Mr. V.D. Paluskar are the pioneers in popularizing Hindustani

Classical Music through the concept of music schools, started grading system of music school and classroom-teaching system of classical music. They also did lots of seminars and conferences to promote the music as well as opened Music University (Bhatkhande Sangit Vidyapeeth, Lucknow) to recognize and to give popularity to this form of music.

RAGA

The permutations and combinations of the 12 notes (Shuddh and Komal) create a melodic pattern known as “Raga” (Gandhe & Tare, 2020). Raga is a group of different unique notes that remain having some singular properties like Arohana, Avarohana, pakad and tonal Components: Naad, Swara, Shruti, Thaata etc. (Anitha & Parameshachari, 2016). Ragas are classified with regard to the swaras (notes) embedded in them into three categories namely Sampurna (Ragas containing all the seven swaras in the aaroha and avaroha), Shadhava (Ragas containing six swaras in the aaroha and avaroha) and Audava (Ragas containing 5 swaras in the aaroha and avaroha). These are further categorized into Audhava-Audhava, Audhava-Shadhava, Shadhava-Audhava, Shadhava-Shadhava, Sampurna-audhava, Sampurna-Shadhava, Audhava-Sampurna, Shadhava-Sampurnasub categories (Rao P, 2014 & Kumar V, 2014).

Table 1: Classification of Raga based on number of notes in a scale

Name	No of notes	Example of The Raga	Included Swaras
Sampoorna	7	Yaman	Ni, Re, Ga, ma (Teevra), Dha, Ni Sa
Shadhava	6	Sohini	Sa, Ga, ma, (Teevra), Dha, Ni, re (Komal), Sa
Audava	5	Bhoopali	Sa, Re, Ga, Pa, Dha, Sa

THAAT

There exists ten thaats made of a combination of komal and shuddhswaras. These ten thaats form the basis for the other Ragas to be derived in the Hindustani music. Thaata, in a way is considered to be a parent Raga. The ten thaats forming the basis for the other Ragas are shown in the following table (Desai et.al, 2021)

Table 2: Classification of Thaats

Thaat name	Examples of Derived Ragas
Bilaval	Bihag, Durga, Hamsadhwani
Khamaj	Jog, Jayjayvanti
Kafi	Abhogi, Bahar, Bageshree
Asavari	Darbari Kanada, Kausi Kanada, Jaunpuri
Bhairavi	Bilaskhani Todi, Maalkauns
Bhairav	Ahir-Bhairav, Gauri, Gunkali
Poorvi	Basant, Lalit, Shree
Todi	Madhuvanti, Multaani, Todi
Marwa	Bhibhas, Sohini, Puriya
Kalyan	Shuddh kalyan, Shyam Kalyan, Bhoopali

1.2 RAGA TIME SCALE

Hindustani Classical Music has the unique characteristics of assigning definite times of the day and night for practicing or performing different Ragas (Pavlicevic et.al, 1994). This Raga time scale is constructed on the basis of experiences felt by the practitioners of a particular Raga, which tells us at what period of the day or night, the Raga would appear to be at the height of its melodic beauty and majestic splendour. There are some Ragas, which are very attractive in the early hours of the mornings, others which appeal in the evenings, yet others which spread their fragrance only near the midnight hour. This connection of time of the day or night, with the Raga is based on a daily cycle of changes that occur in our own body and mind which are constantly undergoing subtle changes in different moments of the day and stimulate different moods and emotions (Gold et.al, 2005). The following schedule will summarize the specific time periods. The 24 hour period is divided into 8 beats (Prahara) each three hours long, as follows:

Table 3: 24 hour Timescale of Hindustani Classical Music

Time	Prahara	Examples of Raga
7 a.m.-10 a.m.	1st beat of the day, Early Morning	Raga Todi
10 a.m. - 1 p.m.	2nd beat of the day. Late Morning, Noon	Raga Vrindavani Saranga
1 p.m. - 4 p.m.	3rd beat of the day. Afternoon	Raga Bhimapalasi
4 p.m. - 7 p.m.	4th beat of the day. Twilight, Dusk	Raga Puriyadhanashri

7 p.m. - 10 p.m.	1st beat of the night. Evening, Late Evening	Raga Desh
10 p.m. - 1 a.m.,	2nd beat of the night. Night, Midnight	Raga Darbari Kanada, Raga Bageshree, Raga Malkauns
1 a.m. - 4 a.m.	3rd beat of the night. Late Night	Raga Sohini
4 a.m. - 7 a.m.	4th beat of the night. Early Dawn, Dawn	Raga Bhairava

2. MUSIC THERAPY

Music Therapy is a scientific method of effective cures of the disease through the power of music (Bruscia, 1998). It restores, maintains and improves emotional, physiological and psychological wellbeing (Crowe et.al, 2007). The articulation, pitch, tone and specific arrangement of swaras (notes) in a particular Raga stimulates, alleviates and cures various ailments inducing electromagnetic change in the body (Sarkar & Biswas, 2015). Symphonies of Raga have a definite soothing effect on the mind as well as on the body (ZY You et.al, 2002). Repeated listening to the particular Raga being chosen for a particular disease produces a network of sound vibration. The muscles, nerves and the chakras of the affected part are contracted when one impulse is given and relaxed during the interval between two impulses. Thus, during contraction of the tissue, musical notes make the blood flow out of that particular area and in the interval there is relaxation and a state of reduced pressure is produced in these areas. In this way, the blood from the adjacent area will flow there. This process is repeated again and again and the blood flow and energy flow in that part is enhanced. This makes quick, fast healing. Energy from URF (universal energy field) to HEF (human energy field) transmitted by the strokes of the different tones of Raga affects the CNS (Central nervous system) because the roots of the auditory nerves are more widely distributed and have more connections than any other nerves in the body.

Music beats have a very close relationship with heartbeats (Ulrich, G. et.al, 2007). Music having 70-75 beats per minute equivalent to the normal heartbeat of 72 has a very soothing effect. Likewise, rhythms, which are slower than 72 beats per minute, create a positive suspense on the mind and body since the mind and the body anticipates that the music will speed up and this restored vital energy gives a deep relaxation to the body. Rhythms which are faster than the heart rate excite and rejuvenate the body. Hindustani Classical musical considers Ragas to depict specific moods too (Thaut, 1989).

It is believed that the human body is dominated by the three Doshas- Kapha, Pitta and Vata. Kapha represents the basic elements Water and Earth (governs movement), Pitta represents Fire and Water (governs metabolism) and Vata represents Space and air (governs assimilation in the body). These elements work in a cyclic order of rise and fall during the 24-hour period. In addition, the reaction of these three elements differs with the seasons. Hence, it is said that performing or listening to a Raga at the proper allotted time can affect the health of human beings. Similarly, everyday two cycles of change pass through our body, each bringing a Vata, Pitta, or Kapha predominance (Gold, 2007, Deore, 2016)

The approximate times of these cycles are as follows:

Table 4: Cycle of Different Dashes

1 st Cycle	2 nd Cycle
6 a.m. to 10 a.m. - Kapha	6 p.m. to 10 p.m. - Kapha
10 a.m. to 2 p.m. - Pitta	10 p.m. to 2 p.m. - Pitta
2 p.m. to 6 p.m. - Vata	2 a.m. to 6 p.m. - Vata

Each Raga is associated with a definite mood or sentiment that nature arouses in human beings. The ancient musicologists were particularly interested in the effects of musical notes, how it affected and enhanced human behaviour. Music had the power to cure, to make a person feel happy, sad, disgusted and so on. Extensive research was carried out to find out these effects. This formed the basis of time theory, as we know it today. (Sarkar & Biswas, 2015)

3. ANALYSIS OF THE SELECTED RAGA

3.1 RAGA DARBARI KANADA

Darbari Kanada or simply Raga Darbari, is a Raga in the Kanada family, which is thought to have originated in Carnatic music and brought into North Indian music by Miyan Tansen, the legendary 16th century composer in emperor Akbar's court. This tradition is reflected in the name itself, Darbar is Persian derived word in Hindi meaning "court". As the most familiar Raga in the Kanada family. It is also sometimes written as Durbari. In Hindustani Classical Music, Darbari Kanada is a grave Raga, played deep into the night and with potential for profound emotional impact (Kulkarni and Antapurkar, 2017). The Raga comes across as a musical entity with controlled power, philosophical depth, emotional richness and regality (badge of royalty). Darbari Kanada, due its gravity, is rightly called the Raga of the kings (or their durbar) or the king of Ragas. Darbari Kanada has the

following Arohana and Avarohana (ascending and descending notes).

Aroh: ni Sa Re ga Re Sa, ma Pa, dha ni Sa*

Avroh: Sa* dha ni Pa, ma pa, ga, ma Re Sa

Jati: Sampoorana - Chhadav

Vadi: Re

Samvadi: Pa

Vikrit: Ga, Dha, ni (Komal)

Virjit: Dha in Avroh

Created from the notes of Asavari Thaata, the Raga acquires its darkness from the Komal Ga, Dha and Ni. Darbari Kanada has an interesting approach to its intervals. The oscillated treatment of two swaras – komal Ga, and komal Dha are much lower than usually found; this lower than normal flattening is often referred to in Indian music as *ati-komal*. It is this extreme alteration of the intervals that helps give Darbari Kanada its distinctive character. These two oscillations are fundamental to the sculpting of the two phrases which virtually define the melodic personality of the Raga (ga Ma Re and dha ni Pa). The occurrence of repeat swaras- as double or triple combinations like Sa Sa Sa, Ni Ni Ni, Pa Pa Pa..... is a special feature of this Raga. The phrases of Ga Ma Re Sa and Ni Pa, the signature phrases of Kanada group of Ragas feature in this raga with a characteristic substance or weightiness. The undulation (the specific wavy pattern) of Ga is specially significant in setting the mood of the Raga. (anuradhamahesh.wordpress.com)

Several researchers have analysed the therapeutic effects of this Raga using different methods. In 2019, researchers Chatterjee and Chatterjee investigated the effect of Raga Darbari Kanada on psychological variables such as depression, anxiety and stress among elderly adults. They asked the participants to listen to the instrumental version of the Raga every day before sleeping at night for 8 weeks. The results revealed that after a period of two months there was progressive and significant reduction in depression, anxiety and stress in the participants as well as improvement in sleeping problems (Chatterjee and Mukherjee, 2019)

Kulkarni and Antapurkar (2017) carried out a single open clinical trial wherein 30 patients of Nidranasha (Insomnia) between the age group of 18-60 years, who found it pleasant to listen to Darbari Kanada Raga were asked to listen it just once at desired routine time of sleep for 7 nights. Insomnia severity index was recorded before, during follow up and after listening to given music for 7 nights. Wilcoxon signed-rank test and Paired t test was applied to observations. As $p < 0.05$ i.e. at 95 % level of significance the result was significant; which shows that regular listening to Darbari Kanada Raga is very beneficial for the management of Insomnia. According to Artipedia, The therapeutical effect of Darbari Kanada is said to be very effective in easing tension and anxiety, Providing great relief from Headache (Acute), Migraine, Mind Concentration, Grief, Mental shock, and promotes Good Sleep.

A scientific study by Bardekar and Gurjar analyzing EEG signals in a person while the person is listening and experiencing an emotion implies that Raga Darbari Kanada can help in defusing mental tension, particularly in the case of hysterics. It is also reported that this Raga helps in curing Bronchitis and Asthma (Deepa, 2020). In Ayurveda also, Raga Chikitsa prescribes the listening of Raga Darbari Kanada for the treatment of headaches (ayurvedaforyou.com).

This Raga has been extensively used in Indian Cinema. There is a plethora of lovely songs in this Raga. The evergreen hit *Satyam Shivam Sundaram* sung by the Nightingale of India Lata Mangeshkar is framed in this raga. Other movie songs include are “Ghunghat Ke Pat Khol Re Tohe Piya Milenge”, “Jhana Jhanak Tori Baje Payaliaya”, “Mujhe Tumse Kuch Bhi Na Chahiye”, “O Duniya Ke Rakhwale” etc. (anuradhamahesh.wordpress.com)

3.2 RAGA MALKAUINS

Raga Malkauns is a very popular raga in the Hindustani Classical Music. Raga Malkauns belongs to Bhairavi Thaata and is a pentatonic Raga i.e., its type is Audav Audav and this Raga is sung at late night too. In Raga Malkauns Rishabh and Pancham are prohibited. When ascending (aaroha), the notes are Sa ga Ma dha ni Sa, while descending (awaroha), the notes are Sa ni dha Ma ga Sa. The *vaadi swara* (prominent note) of Raag Malkauns is Madhyama. *Sanwaadi Swar* (second prominent note) is Sadaja. These notes, in combination, portray darkness and secret. The Raga is said to have evolved when Lord Shiva performed the Taandava dance. The Raga thus evokes a feeling of vigour or we can say this Raga is a “veer” rasa Raga. And as traditions in Indian classical music ascribes this vigour and veer rasa is not the veer rasa of the battlefield but a sense of conquering the self and reaching a state of inner satisfaction (ragascope.com).

Jayamala et.al (2021) did a scientific study with thirty undergraduate medical students of both genders for assessment of emotional intelligence & general intelligence before and after music intervention. Pre-recorded music of Raga Malkauns and Raga Yaman were heard by students for 6days /week for 6 weeks in the department of Physiology. After music intervention, significant improvement in general intelligence test - DSST (digit symbol substitution test) scores ($p=0.0005$) but not in global Emotional Intelligence (EI) or any of the four subscales of EI ($p>0.41$) was found out. In a sample of elderly adults (above 60 years of age) of Chennai, Tamil Nadu, administration of music therapy using raga Malkauns for a time period of 22 minutes, in the evening for 30 days was found to be significantly effective in lowering blood pressure (Lakshmi and Bhushan, 2015).

Bandopadhyay and Bhattacharya (2018) did a study on the Autonomic Nervous System of high blood pressure patients through ECG data and HRV (Heart Rate Variability) data after they were made to listen to instrumental (sitar) recitals of Raga Malkauns. They found conclusive evidence to report that the drut (fast) version of the Raga Malkauns improves heart function through dominance of the parasympathetic nerves on the Autonomic Nervous System.

Many popular songs from Indian Cinema are based on Raga Malkauns, viz, Man tarapat hari darshanko (movie - Baiju Bawra), Adha hai chandrama rat adhi (movie – Navrang), Tu chhupi hai kahan (movie – Navrang) Ye kahani hai diyeki aur tufanaki (movie - Tufan aur Diya) etc. (indiaforums.com)

3.3 RAGA BAGESHREE

Raga Bageshree is also Madhya Ratri Raga, which is suitable for both types of Shringars namely Virah and Karuna. Originated from the Thaata Kafi, it is a melody that pleases in isolation and is effective in emotional expression. Pancham swar is prohibited in Aaroh and Gandhar and Nishad are Komal. Rest All Swaras are shuddha. As a result, this Raga belongs to Jati Shadharv – Sampurna. The most prominent swar (Vadi) is Madhyam and the second prominent swar (Samvadi) is Shadaj.

Aaroh: Sa Re ga ma Dha ni Sa*

Avroh: Sa* ni Dha ma Pa Dha ma ga Re Sa

Many researchers have reported the therapeutic effects of Raga Bageshree. It is reported that this Raga arouses a feeling of darkness, stability, depths and calmness and is also used in treatment of diabetes and hypertension (Chatterjee, 2018), specifically in the treatment of low blood pressure. It is also reported that Raga Bageshree can uplift the mood and can be effective in the treatment of depression (sargambook.com) and cure insomnia. An interventional study was conducted on Type-2 Diabetes Mellitus patients attending the Medicine outpatient department (OPD) and receiving oral anti diabetic agents with the same dosage regimen for two months. They were divided into a test and a control group.

Similarly, non-diabetic healthy volunteers were recruited from the general population, with their informed consent, and a similar division into groups was carried out. Random blood sugar (RBS) was estimated with and without exposure to Raga Bageshree for 30 minutes in test and control group subjects respectively. On applying relevant statistical tests to the data generated, significant reduction in blood sugar was found in all four groups (Pillai & Dave, 2018).

Many popular songs from Indian cinema are based on Raga Bageshree, viz, “Shubh din aayo” by Ustad Bade Ghulam Ali Khan from Mughal-e Azam (1960); “Kaun aaya mere man ke dware” by Manna Dey from Dekh Kabira Roya (1957); “Ghar aa ja ghir aaye” by Lata Mangeshkar from Chhote Nawab (1961), “Naa jiya lage na” by Lata Mangeshkar from Anand (1971) etc. (songsofyore.com)

4. SUMMARY

Hindustani Classical Music is enriched with different kinds of Ragas with definite structure of swara composition, which are further classified in a 24 hour time scale, which suggests the proper time period of the practice of a particular Raga for its impact to be the fullest. Out of this time scale, three evening Ragas and their salient features, namely Raga Darbari Kanada, Raga Bageshree and Raga Malkauns are presented in this study. The effectiveness of music therapy on the human body is tremendous. Various researchers have done detailed study on treatment of different ailments by Music therapy with the help of numerous Ragas of the Hindustani Classical music from the point of view of Allopathic as well as Ayurvedic system of medicine. In this study, a report on the Music Therapy treatment with the help of the selected Ragas are presented.

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