Guidelines Adopted for Musical Selections for the Study
CHAPTER 4

GUIDELINES ADOPTED FOR
MUSICAL SELECTIONS FOR THE STUDY

4.1 MUSICAL COMPOSITIONS AND THEIR HEALING POWER

The ancient healing roots of music in Indian tradition and culture provide a strong context for MT in India. Indian musical traditions reflect the belief that music is the medium to pray for health and disease free life. There are numerous anecdotal reports vouching to have brought miraculous cure to diseases by music and their power of sound, word and intonation coupled with belief and devotion of the singer which brought back even dead men alive.

4.1.1 Vedic Tradition And The Power Of Sound

Indian Vedic traditions had a great intuition about the power of sound and intonation. The Vedic chants and music which had more sound and rhythm, used as a source of healing and upliftment reflected the intuition that each intonation and inflection of voice could have beneficial or adverse effects. The Vedic chants were used by the people to please the presiding deities of different vedic sacrifices or Yajnas to get benedictions of brilliance, power, beneficence and wisdom.
Whitney (1971) in his translation with a critical commentary on Atharva Veda Samhita vide kandam 1, prapatakam 1, anuvakam 3 and suktam 12 indicated that accompanying the drinking of various things in a healing ceremony, vedic hymns were also used against disease arising from hurtful changes of wind, bile or phlegm. The translation implied emendations and paying homage to lightning conceived as the cause of fever, headache and cough, to release the sufferer from head ache and cough. The verses used to worship against various ailments are quoted below.

\[\text{jarayujaḥ prathama usriyo vruṣā vāthabrajā}
\text{sthanyanneti vruṣṭyā ī}
\text{sano mrudāti tanvarujugo rujan ya}
\text{yekamojasredhā vichakrame īī}
\]

\[\text{(1)}\]

\[\text{ange ange śociṣा śiśriyāṇam}
\text{namasyantastvā havisā vidhema ī}
\text{ankānsamankān havisā vidhema yo}
\text{agrabhīt parvāsya grabhītā īī}
\]

\[\text{(2)}\]

\[\text{munca sirsaktyā uta kāsā yenam}
\text{parusparurāviveśā yo asya ī}
\text{yo abhrajā vātajā yaśca śuṣmo}
\text{vanaspāṭīntṣacatām parvatāmsca īī}
\]

\[\text{(3)}\]

\[\text{śam me parasmai gātrāya}
\text{śamastvavarāya me ī}
\text{śam me caturbhyo angebhyaḥ}
\text{śamastu tanve ma ma īī}
\]

\[\text{(4)}\]
4.1.2 Sangam Literature

In the Sangam period, we have references to a pann (melody) called “Kanchi” which was sung by a group of women called kurinchier, to soothe the pain of the soldiers, who were wounded in the warfront about which we have references in Purananuru (an anthology of Tamil poems). The poem Pathupattu carried numerous references to music and musical instruments used by a particular clan of musicians called “Panars”, as early as the first and second centuries, according to the time theory of raga-s and that they chose their songs suitable to time and sentiments durious various occasions to give a call for war, to chase the enemies, to create valour, to excite the warriors and to heal the wounds of the warriors in the battle fields. In the Tamil poem, Perungathai, there is a mention about a wild elephant getting subdued by playing on the yazh. There are also references in the poem Akananuru that the melody Kurinchi pann was used to attract the attention of an animal which was destroying the crops.

4.1.3 Tevaram

There are many anecdotal references that the tamil hymns of Tevaram, the earliest patterns of practical music on record which had the old and popular panns in which they were composed by the Tevara Trinity Tirugnana Sambandar. Tirunavukarasar and Sundaramurthy Nayanar had curative effects. There are many instances documented that the Tevara Trinity cured serious illnesses by singing these hymns.
“Mandiramāvadu nīru vānavar mēludu nīru” a hymn of Tirugnana Sambandar in Gāndhara pann cured a Pandiyar king of his severe fever. Sundaramurthy Nayanar by rendering tamil hymns “Ālantānugand amudusei dānai” and “Mīḷā adimai umakē alai pirarai vendade” in pann-s Takkesi and Senduruthi respectively got back his lost eyesight. Tirunavukarasar got relieved of his severe stomach ache on having been applied the holy ash (tiruniru) and singing the hymn “Kūtrāyina vāru vilakakilīr kodumai pala seidana nānariyēn” in pann Kolli. Tirugnana Sambandar also reported to have brought dead men alive by singing hymns in pann Indala beginning with the phrases“Sadaiyā yenumāl sarannē yenumāl” Kalaivani&Tamilvelu (2006).

4.1.4 Trinity

Syama Sastri’s ‘Durusuga krupājūci’ in Saveri appeals to Goddess Devi for a disease free healthy life. There are many anecdotal reports like ‘Nā jivā dāra’ by Tyagaraja in raga bilahari brought back a dead man alive and that Muthusamy Dikshitar used navagraha stuthi (Divākara Tanujam in Yadukula Kambodhi) to relieve his disciple of stomach ache.

4.2 SANSKRIT TREATISES ON HEALING POWER OF MUSIC

Sanskrit treatises like Brihaddesi have assigned the 22 sruti-s into the nature of Vata, Pitta, Kapha and Sanmipada (admixture of the three), the four dhatu-s (humours) that hold the body, the three dosa-s that represent an imbalance in the three and the three mala-s or dirt arising out of them. Vatsyayan(1992) and as quoted by Manoroma (1996). Ahobal has classified
the raga-s in three groups namely Vata, Pitta and Kapha, which notes the
effect of raga-s on human body. In Sangita Ratnakara, Sarangadeva has
described the connection of svara-s with chakra, cells, nerves and
physiological structure of human body. The verses in Sangita Makaranda of
Narada as quoted by Manorma (1996)

aayurdharamayashobudhi dan dhanayam falam labhet,
ragabhividdhisantanam purnaragah prageeyate

sangramrooplavanyaviraham gunakirtanam,
shadvenpragatvyam lakshanam gaditam yatha

vyadhinashi shattanashi bhayashokvinashane,
vyaadhidaridrayasantape vishamgrahmochane.

kamadambernashe ch managalam vishsanhrte,
audeven pragatvyam gramshantyarhkarmani.

indicate that pentatonic raga-s could be used for curing diseases, winning
over enemies, overcoming fear and sorrow, poverty and ills, sickness and bad
health. Raga-s with six notes were beneficial in conquering battle, attaining
beauty, youth, charm and singing of good names and works of warriors.
Sampoorna raga-s (Raga-s with all notes) were used for strength, wisdom,
wealth, good harvest, fruits and prosperity and children Manorama (1996),
Premeela (2006).
Muthaiyah Bagavadar in his *Sangita Kalpadrumam* describes how *Nada*, the primordial sound forming the basis of music evolves in different stages of *para, pashyanthi, madhyama* and *vaikhari* from the different energy centres found in human body and how opening up of these seven *chakra* centres reflect their physical, psychological and physiological characteristics to reestablish our inner balance restoring health and form.

![Figure 3 Energy Centres in Human body](image)

Further, the existence of an extinct Sanskrit work named *Raga Chikitsa* Varadalakshmi (1948); Premeeela (2006); Sairam(2005) as the name indicates dealt with the curative value of *raga*-s. All these provide a context for carrying out scientific research to vouch for the therapeutic effects of Indian music.

In the contemporary period, MT in India still exists as a belief system that Indian *raga*-s can be used as a complementary medicine in clinical
settings for many ailments by musicians, musicologists, psychologists and medical professionals. Sairam (2004). These belief systems have to be organized and systematized. There is an imperative need at this juncture to make use of the rich and unique Indian musical resources and to develop a theoretical framework basing on culturally sensitive approaches, techniques and methods that could be suitable to be adopted in clinical applications in Indian context. Fresh view points on the various approaches that could be used in the selection of music in therapeutic work that would suit the structural content, societal functions, philosophical framework and the spiritual influence of the Indian musical resources have to be integrated for clinical applications.

4.3 SURVEY

The most general principle for musical selections in music therapy interventions is that the musical piece must be liked and preferred by the individual to get the best therapeutic results. Listening to and appreciating music is a subjective experience and hence preferences are to be recorded. Also music therapists choose musical selections based on musical preferences to achieve desired therapeutic results. Iwanaga & Moroki (1999); Thaut & Davis (1993). Music therapy interventions have to take care of cultural differences in music preference and provide culturally specific selections to have a therapeutic effect. Good et al.(2000). Musical selections depended not only on musical preferences but also on factors like treatment goals and approaches and thus there is a need to develop a tool to assess the listening pattern of the patients as a first step towards treatment planning. The focus
group discussions revealed that different music listening patterns exist depending on the socio economic and cultural backgrounds besides age, musical upbringing, musical training and musicality factors.

The test card developed by Ambujam (1981) gave a direction to the factors to be identified for developing the listening pattern schedule to be musical training and music preferences. The factors music preferences and music preferences and was confirmed by Mythily (1994) who indicated moods to be another factor apart from musical training and music preferences. Inventory of music experiences and training Mamta (2000) indicated the importance of assessing musicality of the individuals. The other themes emerged during focus group discussion with the patients, research scholars and experts were levels of training, the musicality in the family and music culture in the family, the time available to listen to music, the context in which music is preferred, the general reactions to music and importance of lyric in the songs etc.

The following schedule was developed and a survey undertaken to assess the general trends of listening pattern, the factors influencing the musical preferences, the factors influencing the musical selections and the approaches that could be adopted in clinical situations.

This tool helps in assessing the factors influencing the musical preferences of the individuals and the factors influencing the musical selections on the part of the music therapist based on which the researcher resorted to framing of general guidelines on the various approaches that could
be used in the selection of music in therapeutic work and formulated two broad approaches for musical selections. 1) *Raga* – based approach, 2) *Genre*-based approach (See appendix 1: 1.1 page - i)

Towards theorising musical selections, the following principles were to be considered.

1) The cultural and traditional Indian music has a spiritual and philosophical influence, which expresses one's devotional feelings. This is an integral part of one's religion and is a unique aspect of Indian Music Therapy. It is very important that instead of merely copying western music therapy concepts, it is important to develop suitable culturally sensitive approaches, techniques or methods to be adopted in various unique clinical situations.

2) Musical preferences of individuals are influenced by factors like early childhood exposure to classical music/interest for classical music in the family lineage/musical training/cultivated interest by parents.

3) Musical preferences are learnt in childhood and further new interests in future are influenced by childhood music listening experiences.

4) Socio-cultural and economic background influences the appreciation of highly structured and aesthetic Indian classical music, which requires higher levels of cognition, analytical listening ability and ear training.
5) Musical preferences are influenced by the philosophy, value system and culture of the individual in the society.

6) The emotional appeal to musical pieces is placed in context. In clinical situations, the circumstances and the present experiences influence the emotive appeal of the musical pieces.

4.4 RAGA – BASED MODEL TO MUSICAL SELECTIONS

The raga based model broadly applies both instrumental and vocal music and all other types of music based on the context and the preferences of the individual as a person who is trained or exposed to music could appreciate and understand the aesthetics of classical music and derives pleasure on listening to the same. The music education, which involves aural training enables the individual to listen to all kinds of styles, the most complex ones to the simples ones and perceive the most complex classical music to be both aesthetic and analytical and the simplest also enjoyable and entertaining. The most complex aspects of the raga is enjoyed irrespective of the language in which it is sung.

Pictorial description of raga-based model to musical selections based on the survey, see figure 4. Raga Dhvijavanti was randomly selected and two compositions, one in Karnatic kriti and the other a light classical composition which were used in the intervention were taken up for analysis. The structural analysis of a Karnatic kriti, see figure 5.
Figure 4  Raga Based Model of Music Therapy
Raga : Dhvijavanti
Tala : Adi
Arohana : SRGMNOPS
Avrohana : SNDPGMGRGS

Pallavi

a - khi lā - - - ndē - - - iva hī - I rā - - - kṣa I mām - - - I I
a - khi - - - lā - - - ndē - iva hī - I rā - - - kṣa I mām - sī - I I
a - khi - lā - - - ndē - - - iva hī - I rā - - - kṣa I mām - sī - I I
ā garna sam prādā - - - I - - - ya ni - pu - I rē - sī - I I
a - khi - - - lā - - - ndē - - - iva hī - I rā - - - kṣa I mām - sī - I I
ā garna sam prādā - - - I - - - ya ni - pu - I rē - sī - I I

Anu Pallavi

ni - khi la lē - - - ka - - - ni - - I tyā - - - tmi - kē I vi - ma lē - I I
ni - khi la lē - - - ka - - - ni - - I tyā - - - tmi - kē I vi - ma lē - I I
ni - - - ma lē - - - sīyā - - - ma i le - - - sa - ka - I la ka - lē - I I

Charanam

lam - bo - - - dha - ra - guru - I gu - ha - pū - I - - - ji tē - I I
lam - mba - la kō - doha - I - - - sī - tē - - - ha - - - sī - tē - I I
P. : Š. Š. Š. : Š N I D P P. Ř. I G. R. Š. I I
vāg - de - va - tā - - - rā - I - - - chi tē - - - va ra de - I I
va - ra slai - - - - - - la rā - - - I ja - nu tē - - - I sā - - - - - ra - dé - - - I I
jam - bā - n sam - bha - vītē janārātha l nātu - dhvijāva I nī - rā gauné - I I
ja - I I ma - ddalu - i - jharavā - - - dya l nā - - - damudē - I jnāna - prādē - I I

Figure 5  Structural Analysis of a Karnatic Kriti
4.5 GENRE - BASED MODEL OF MUSICAL SELECTIONS

Genre-based model could be applied to patients who are uninitiated to music or who have poor exposure to music. Taking into account the importance of culture in music and music therapy, it is a socio cultural approach incorporating the music of one’s own culture. (Gfeller, 1995). In the day to day routine of one’s life, it is the common and popular music that is heard over radios and televisions and in every festival and function and is familiar to the masses. The genre-based approach is language and lyric based and is simple to understand and does not challenge the listener. The lyrics with the music give comfort and soothe the listener and sometimes also energize and activate the listener depending on the context. The lyric being couched with simple melody fitting into the beat of the rhythm perfectly and conversational in nature attracts the listener.

The pictorial description of genre-based model to musical selections, see figure 6

The structural analysis of a light devotional song see figure 7
Figure 6  Genre Based Model of Music Therapy
Figure 7 Structural Analysis of a Light Devotional Song
### Table 1
Comparison of reactions of subjects to a Karnatic kriti and light devotional music by subjects who are untrained in music, belonging to lower socio economic strata

<table>
<thead>
<tr>
<th>Reactions to Karnatic kriti by a musically untrained subject in lower socio economic strata</th>
<th>Reactions to light devotional song by musically untrained subjects in lower socio economic strata</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vocal Music</strong></td>
<td>Feel a compassion for the sore heart and succour when inner strength is failing.</td>
</tr>
<tr>
<td>Linguistically not understandable</td>
<td>The spiritual undercurrent is a strength and a morale boost.</td>
</tr>
<tr>
<td>The lyric is poetical and complex to understand.</td>
<td>The lyrics in songs bring solace and peace of mind in a distressing mood.</td>
</tr>
<tr>
<td>Music is complex and is painful to hear.</td>
<td>It is like a prayer.</td>
</tr>
<tr>
<td>Elongation of words bring pathos</td>
<td>The beat of the music lifts the heart and the mood is improved.</td>
</tr>
<tr>
<td>Meaning of lyric is incomprehensible</td>
<td>Elevate the spirits which are low.</td>
</tr>
<tr>
<td><strong>Instrumental Music</strong></td>
<td>Feel relaxed and forget the worries.</td>
</tr>
<tr>
<td>Not considered to be music as no songs forthcoming</td>
<td>Do not feel the pain.</td>
</tr>
<tr>
<td>Disinterested in listening</td>
<td>Evokes a strong feeling that god will resolve all issues.</td>
</tr>
</tbody>
</table>
4.6.1 Structural components in light devotional music contributing to therapeutic effects

1. Complex sudden jumps to different levels of octaves do not occur
2. Lingering in same \textit{svara}-s and also lingering in few \textit{svara}-s are common which are easy to comprehend
3. Simple comforting words in regional languages are easy to understand and convey meanings easily.
4. Words are not split and fit into the rhythm
5. Songs mostly dwell in two octaves.

4.6.2 Reasons attributed to complexity of the Karnatic kriti

1. Profuse use of \textit{jaru}-s, \textit{gamaka}-s and \textit{sangathi}-s to bring out \textit{raga lakshana}
2. Elongation of words that don’t fit into the exact beats of the rhythm
3. More importance to expressing the \textit{raga bhava} and not for the expression of lyric, the meaning of which may be disintegrated while rendering the song.
4. The songs are in different languages and may not be only in the language known to the singer and the listener.

4.7 INTERVIEWS

Two interviews were carried out, one with a surgical oncologist and another with a radiation oncologist to know their opinion, ideas, knowledge and receptivity about MT being used as a complementary treatment approach in oncology settings along side mainstream medicine. The responses regarding the ways by which MT researches could be carried out, the
probable areas in which the studies could be tried and the perceived benefits to make MT studies evidence-based were recorded verbatim and are presented in a CD in appendix 5

4.8 CASE STUDIES

Based on the these information, the researcher undertook to experimenting on these approaches in a more objective manner by systematically documenting the findings and resorted to a case study design, which is a common feature of staying close to the practice of the clinician Aldridge (2002) to involve the patient in the process to make her also reflect what is going on Aldridge (2003).

The first case study was on “The Effects of Music Therapy and Counselling on a Squamous Cell Carcinoma – Hyphopharynx Patient” to find out if receptive music therapy could be combined with comprehensive counseling and also if health information could be provided as a cognitive behavioural intervention to address psychological distress and situational anxiety, which are common problems with cancer patients in a hospital environment. The researcher used genre - based approach for the case study. (please see appendix 1:1.3 page - 15)

The 2nd case study was undertaken by the researcher to record the positive effects of listening to music (Karnatic music) on a patient who was well trained in music using the raga - based approach.
4.8.1 Patient Data

The patient was from Cancer Institute (WIA) Adayar, a 60 year old male, a graduate, employed in a government sector. After completing the investigations, in clinical diagnosis, he was found to have Squamous Cell Carcinoma – Buccal mucosa with the TNM staging T4N1NO (Advance staged disease)and was admitted in the hospital for radiation treatment for 25 days. Physical symptoms were severe pain radiating to the head, sores in the mouth and difficulty in swallowing food. Behavioural symptoms included sleep disturbances, crying spells and he was totally withdrawn from others.

4.8.2 Aim And Objectives

1. To help patient to have a reduced perception of pain through music therapy sessions as an active focus of attention using Karnatic music.

2. To help the patient in the onset of sleep and alleviate fatigue by using receptive Karnatic music sessions.

3. To bring comfort, hope and peace of mind to the patient.

4.8.3 Therapeutic Intervention, Methods and Procedures

The researcher recorded the patient variables including age, gender, cultural heritage, education, income, type of cancer, the symptoms, and the procedures to be performed and previous procedures along with the music listening pattern.
4.8.4 Psychometric Measures

The researcher developed a schedule of cancer pain and its functional symptoms in two formats to interview the patients before, during and after listening to music to record the immediate effects of music as experienced by the patients.

The schedule had totally 12 items in all, 5 items assessing the symptoms of cancer pain and its functional symptoms before listening to music and 7 items after listening to music. 4 items were in Likert four point scale with scores 0 to 3 and the other 8 items were in ten-point semantic scale with two extremes 0 for no symptom and 10 for the ‘very much’ symptom. The schedule was in English. The questions were read out aloud to the patient and the responses recorded by the researcher. The pain schedule was recorded weekly twice 1) immediately after the diagnosis 2) before radiation treatment 3) during radiation treatment and 4) after the radiation treatment. Item No.2 and 7 indicated whether music served as active focus of attention and were reverse scored. Item No.s 6, 8, 9, 10 & 11 were taken for analysis to record the effects of music on pain and fatigue and also the levels of comfort and peace of mind. Composite scores of < 10 indicated no pain and fatigue and high levels of comfort and peace of mind. 11 < 25 indicated moderate pain and moderate levels of comfort and peace of mind and scores between 26<43 indicated severe pain and low levels of comfort and peace of mind. Item No. in 4 point likert scale was analysed to indicate the effect of music on onset of sleep. (See appendix 2: 2.7 page-52)
The researcher also interviewed the patients with a structured psychological responses check list to record the experiences of the listener during the time of listening to music for qualitative analysis. There were twenty items to describe the different kinds of feelings experienced by the patient. 1) Pain, 2) Sad, 3) Grievous, 4) Bored, 5) Disappointing, 6) Confident, 7) Cheerful, 8) Blissful 9) Satisfied, 10) Optimistic, 11) lonely), 12) Dissatisfied, 13) Pessimistic, 14) Indifferent, 15) Listless, 16) Supportive, 17) Peaceful, 18) Philosophical 19) Pious and 20) Meditative. (See appendix 2: 2.8 page-55)

4.8.5 Procedure

The consent letter for participating in the research was obtained from the patient enrolled for the study.(See appendix 2: 2.11 page-58) The music therapy sessions were given on all the days from Monday to Friday both in the mornings and evenings. The morning and the evening sessions were carried out by the bed side through a CD walkman and as the music listening pattern of the patient indicated his interest in both vocal and instrumental music. Both Instrumental and Vocal music pieces in different raga-s were played to the patient for 30 minutes. For the morning sessions, raga-s with more jaru-s were used. (where jaru-s were used more for linking the svara-s) in medium and fast tempo and in the evening, raga-s with jaru-s (used more as a gamaka) in slow tempo were used.

4.8.6 Results And Discussion

The primary goal of the case study was to use music as an active focus of attention and help the patient to have reduced perception of pain and to
alleviate fatigue. The case study also focused on helping the patient in quick onset of sleep and also to bring high levels of comfort, hope and peace of mind through listening to music.

For analysis, the levels of pain experienced by the patient before and after listening to music were taken from the data recorded by the schedule of cancer pain and its functional symptoms.

![Levels of Pain before and after listening to music](image)

**Figure 8 Levels of Pain before and after listening to music**

The results revealed that the patient did not experience any pain after listening to music on 7 recordings except on one recording when he felt little pain.

Also data was analysed to find out if the patient was experiencing any pain while he was listening to music. The results showed music acted as an active focus of attention during all the occasions when the schedule was recorded (Figure 9).
Figure 9  Levels of Pain when listening to music

Note: Score 3 in all the recordings denote no pain.

When the composite scores were analysed, it indicated that the patient did not feel the pain and fatigue during and after listening to music. The patient also could achieve high levels of comfort and peace of mind. The patient's self report indicated that he did not feel the pain for half an hour to one hour after listening to music when he was having moderate pain and when he had more pain, he used to feel reduced perception of pain. Also the psychological responses recorded by the patient revealed that the patient felt on all the sessions painless, satisfied, confident, cheerful, optimistic, happy and peaceful on instrumental music sessions and after vocal music sessions felt also pious and supportive. Good mood and levels of comfort remained high for about one to two hours after the music listening sessions. After the evening sessions, the patient fell asleep after most of the sessions or felt very sleepy. Analysis of the recordings made on 8 occasions revealed that on 5
occasions the patients went to sleep without giving responses and the other three sessions responded as feeling sleepy.

4.8.7 Conclusion

The instrumental Karnatic raga-s with more of jaru-s used for linking the svara-s may help patients who are trained in music to have a reduced perception of pain and fatigue and bring high levels of peace of mind, comfort, confidence and cheerfulness in the listener and music with jaru-s functioning as gamaka-s may bring relaxation and help in the quick onset of sleep. Raga based approach thus may be adopted in clinical situations to patients who have been trained in music or had prior exposure to classical music or had cultivated taste developed by childhood upbringing.