IMPACT OF GURBANI MUSIC INTERVENTION IN STRESS MANAGEMENT AMONG UNIVERSITY STUDENTS

AMAN KAUR[1] & PROF. (DR.) GURPREET KAUR[2]

[1]Senior Research Scholar, Department of Music, GNDU Amritsar, Punjab
[2]Former Head & Dean Faculty, Department of Music, GNDU Amritsar, Punjab

Abstract

Aim- The purpose of the study was to investigate the impact of Gurbani music intervention in the management of depression, anxiety and stress among university students through pre-test and post-test.

Methods and material- The perceived DASS42 Scale was used to collected data. The treatment was subjected to 8-weeks of Gurbani Music intervention, consisted of daily sessions.

Results- The main effect of *Gurbani* music intervention on depression for pre-test (control vs experimental groups) and post-test (control vs experimental groups) was found $F (1, 98) = 74.45$, $p= 0.00 <.01$ which shows significant difference between pre and post-test groups statistically. Effect of *Gurbani* music intervention on anxiety for pre-test (control vs experimental groups) and post-test (control vs experimental groups) was found $F (1, 98) = 58.72$, $p= 0.00 <.01$ which shows significant difference between pre and post-test groups statistically. Effect of *Gurbani* music intervention on stress levels for pre-test (control vs experimental groups) and post-test (control vs experimental groups) was found $F (1, 98) = 120.05$, $p= 0.00 <.01$ which shows significant difference between pre and post-test groups statistically. Thus it was found that the Gurbani music exhibited a stronger effect in reducing depression, anxiety, and stress.

Keywords: Gurbani Music, Depression, Anxiety, Stress, Shabad Kirtan.

INTRODUCTION

Stress is a normal human reaction. In the present scenario the whole world seems to be under the influence of stress, anxiety and depression. This situation may be caused due to un-accomplishment of the worldly tasks, unfulfilled desires, domestic violence, unstable family circumstances, career obstacles, over worrying of a particular trauma, physical fatigue with mental pressures, fear of loss, feeling of inferiority complex, over and negative thinking, particular incident of humiliation, oppression, persecution etc. All above stressful situations may result into increased heart rate, dry mouth, shuffling hands, decreased oxygen level, wavering of blood pressure, weak immunity etc. long-term stress can leads to serious disorders such as anxiety, depression, insomnia, etc. "Stress is a normal part of life. In small quantities, stress is good; it can motivate you and help you become more productive. However, too much stress, or a strong response to stress can be harmful. How we perceive a stress provoking event and how we react to it determines its impact on our health. Stress management is not about learning how to avoid or escape the pressures and turbulence of modern living; it is about learning to appreciate how the body reacts to these pressures, and about

learning how to develop skills that enhance the body's adjustment. To learn stress management is to learn about the mind-body connection and to the degree to which we can control our health in a positive sense."[1] "People often experience a general state of worry or fear before confronting something challenging such as a test, examination, recital, or interview. These feelings are easily justified and considered normal. Anxiety is considered a problem when symptoms interfere with a person's ability to sleep or otherwise function. Generally speaking, anxiety occurs when a reaction is out of proportion with what might be normally expected in a situation."[2] "Palpitations, hypertension, headache, chest or abdominal pain, sweating, increased urination, tremors in hands and feet. Increased thirst and breathlessness. The physical effects of anxiety may include heart palpitations, muscle weakness and tension, fatigue, nausea, chest pain, shortness of breath, stomach aches, or headaches.''[3] The 'cerebral cortex of our brain works to control all the Positive and Negative thoughts coming into the mind. When something goes wrong in this part, it is very possible for that person to get depressed. Apart from this, the pituitary gland and hypothalamus which regulate hormones can also be responsible for making a person depressed. An imbalance of some key neurotransmitters – serotonin, Nolin and dopamine – is most responsible for depression."[4] Hence it is advisable to manage the inner stress with some supportive therapies at the early stage. There are so many established medical systems to fight and manage the stressful conditions. These include Allopathic, Homeopathy, Ayurveda, Unanipathy, Naturopathy, Acupressure, Acupuncture and some other therapies such as Massage Therapy, Psychotherapy, Mud Therapy, Aromatherapy, Sunrays Therapy, Laughter Therapy, Color Therapy, Yoga Therapy, Meditation, Reiki etc. Music therapy through Classical, Semi classical and Light Music and Devotional/Spiritual Music therapy through Gurbani Music (Shabad Kirtan), Bhajan, Prayer, Ayat singing etc. are some major innovations in the current scenario to heel physical and metal ailments in a very effective manner.

Music throughout the world is known as unique impact on the human soul, as it leads the human soul to the subtler blissful sensations of life. It's scientifically proved in the sound labs that a sound wave passing through the air causes changes in air pressure, our ears respond to this information and our brain processes this sound by converting it into information. It activates neurotransmitters, which are involved in brain planning, attention, learning and memory. Music helps release dopamine, a naturally occurred chemical, in brain which acts as a neurotransmitter and sends message to the brain. It plays an important role in controlling human movements as well as emotional reactions and reduces depression, anxiety and stress. Music is able to relax the mind, energize the body, and even helps people better pain management. Numerous epidemiological studies have tried to define the positive effects of music on mental

health. It is able to enhance happiness and motivation index in humans. Music boosts the immune system to create a positive emotional experience that results into the release of immune boosting hormones. It also helps brain-injured patients to recall their personal memories. This shows the power of music, as well as its various applications in terms of mental health, cognitive functioning, and overall neurological well-being. "Music boosts brainpower. The brain seems to have an innate affinity towards sound, which is applicable to an organized sound that is music."[5] "Music is used to divert one's attention when one is under depression, mentally disturbed and stressed and makes a person relaxed, restful or contended."[6]

The form of devotional music in the Sikh religion is called *Shabad Kirtan*, auspiciously started by Sri Guru Nanak Dev Ji with the Rabab instrument of Bhai Mardana. This link forward, Gurbani music originated from the Sri Guru Granth Sahib with the Bani of Gurus, Bhatts, and Bhagtas. A Musical form with prescribed Ragas of Guru Granth Sahib is known as Gurbani Music. 1430 total pages of Shri Guru Granth Sahib. Gurbani music has also been opted as a great healing therapy to manage physical and mental stress since long time. Experiments are also being carried out by various organizations, hospitals, educational institutes through scientific researches and findings. Eminent scholars are using Gurbani Music (Shabad Kirtan) as a major therapy to reduce mental illness, human fear to rebuild human confidence for holistic development. Gurbani Music in literary and musical form creates the concept of a truthful human being who can choose the path of service, patience, contentment, truth and honesty.

Renowned Sikh scholars S. Hardyal Singh (IAS) and Dr. Balwant Singh have done many scientific practices and experiments on Gurbani therapy. *"Sarb Rog Ka Aukhad Naam"*[7] *"Guru Amardas Rog Nivaran Kendra"* mission was started in Ludhiana in 1983. The organization used Gurbani music as therapy and conduced worldwide health experiments and workshops which could influence patients profoundly and cured them from mental diseases. Another reputed scholar Prof. Surinder Singh Yogi has also been relieving the patient's sufferings from mental diseases through Gurbani Music through his organization 'Naad Yoga' *'Raj Academy'8* London (U.K). Dr. Dharma (U.S.A) has also been using Gurbani intervention to reduce the stress, anxiety and depression under the name of Kirtan Kriyas.

STUDY POPULATION

The main objective for this investigation was to find the impact of "Gurbani Music" therapy in the management of "Stress" "Anxiety" and "Depression". 100 subjects volunteered to participate in the present study. The subjects were purposively assigned into two groups:

- Group-A: Control: (n_1 = 50)

- Group-B: Gurbani Music: (n_2 = 50)

Table 1: Selection of subjects concerning their respective groups.

Subject/s			
Group/s	**Category/s**	**Interventions/Control one**	**Total**
Group-A	n_1	Control	50
Group-B	n_2	Gurbani Music intervention	50
Sample Size	N		100

TOOLS USED

- DASS (Depression Anxiety Stress Scale/Questionnaire) Scales.

VARIABLES

For the present study following variables were selected: -

- Independent Variable- Gurbani Music

- Depended Variables- Depression, Anxiety, Stress

METHODS

GURBANI MUSIC PRACTICES

The treatment was subjected to an 8-week of Gurbani Music intervention. This lasted 8-weeks and consisted of daily sessions.

Table 2: Graphical illustration of 8 weeks of Gurbani Music Interventions.

Weeks	Schedule	Time	Duration
1st Week	Satnam Waheguru Jaap (Simran)	1.00	20 Minute
	Shabad Kirtan (1. Nanak Chinta Maat kro) (2. Kaahe Mann Tu Dolta)	6.00 12.00	
	Mool Mantar Jaap	1.00	
2nd Week	Satnam Waheguru Jaap (Simran)	3.00	25 Minute
	Shabad Kirtan (1. Nanak Chinta Maat kro) (2. Kaahe Mann Tu Dolta)	6.00 12.00	
	Mool Mantar Jaap	4.00	
3rd Week	Satnam Waheguru Jaap (Simran)	6.00	30 Minute
	Shabad Kirtan (1. Nanak Chinta Maat kro) (2. Kaahe Mann Tu Dolta)	6.00 12.00	
	Mool Mantar Jaap	6.00	
4th Week	Satnam Waheguru Jaap (Simran)	8.00	35 Minute

	Shabad Kirtan (1. Nanak Chinta Maat kro) (2. Kaahe Mann Tu Dolta)	6.00 12.00	
	Mool Mantar Jaap	9.00	
5th Week	Satnam Waheguru Jaap (Simran)	11.00	40 Minute
	Shabad Kirtan (1. Nanak Chinta Maat kro) (2. Kaahe Mann Tu Dolta)	6.00 12.00	
	Mool Mantar Jaap	11.00	
6th Week	Satnam Waheguru Jaap (Simran)	13.00	45 Minute
	Shabad Kirtan (1. Nanak Chinta Maat kro) (2. Kaahe Mann Tu Dolta)	6.00 12.00	
	Mool Mantar Jaap	14.00	
7th Week	Satnam Waheguru Jaap (Simran)	16.00	50 Minute
	Shabad Kirtan (1. Nanak Chinta Maat kro) (2. Kaahe Mann Tu Dolta)	6.00 12.00	
	Mool Mantar Jaap	16.00	
8th Week	Satnam Waheguru Jaap (Simran)	18.00	55 Minute
	Shabad Kirtan (1. Nanak Chinta Maat kro) (2. Kaahe Mann Tu Dolta)	6.00 12.00	
	Mool Mantar Jaap	19.00	

GURBANI MUSIC INTERVENTION - SAMPLE DESIGN

The researcher used a predefined experimental setup (Group or Individual), or specified precisely the age range (i.e., university students) as samples. The contents included

- Satnam Waheguru Jaap (Simran)

- Gurbani Music (Shabad Kirtan) (2)

- Mool Manter Jaap

Above Gurbani music in recorded form was played continuously as per fixed schedule. It was observed that all the subjects gradually started feeling destressed and relaxed during the process of hearing and responding to Gurbani Music. Subjects also displayed a considerable improvement in their focus and concentration. The experiment concluded that intervention of Gurbani Music exerted a relaxing impact on the mind of subjects.

RESULTS

A pioneer attempt has been made to analyze the impact of Gurbani Music intervention on Pre-test and Post-test Depression, Anxiety and Stress among University Students and obtain statistics on them. The data has been tabulated and analyzed by applying appropriate statistics by using SPSS V-28. Comparison of Mean or average score was calculated to observe the difference in levels of depression, anxiety and stress among

control and experimental group participants in pre-test condition. The One-way ANOVA has been used to observe the impact of Gurbani music therapy on depression, anxiety and stress on experimental group. The description of results is as follows: -

DESCRIPTIVE ANALYSIS (COMPARISON OF MEAN)

Table: 3 :Values for the impact of Gurbani **music intervention on Pre-test and Post-test Depression, Anxiety and Stress among University Students**

D.V.	Groups	N	Mean	S.D.
Pre-test (Depression)	Control	50	16.14	3.75
	Experimental	50	19.52	3.91
Pre-test (Anxiety)	Control	50	12.56	2.79
	Experimental	50	15.34	3.97
Pre-test (Stress)	Control	50	21.62	3.29
	Experimental	50	25.94	4.35
Post-test (Depression)	Control	50	14.72	3.38
	Experimental	50	12.42	3.63
Post-test (Anxiety)	Control	50	10.90	2.46
	Experimental	50	8.92	2.23
Post-test (Stress)	Control	50	19.16	2.54
	Experimental	50	15.78	3.34

Table 3. shows the Mean values for the level of depression, anxiety and stress among university students. The average values were computed to determine the level of depression in (Pre-test control group) The mean score for depression in pre-test for control group was M= 16.14, S.D.= 3.75 and the values for depression pre-test experimental group was M= 19.52, S.D.=3.91. This shows that experimental group showed high level of depression during pre-test as compared to their control group counterparts. Therefore, hypothesis No.1 which states that "there would be a significant difference in the level of depression among pre-test and post-test, control vs experimental groups of university students" is accepted.

Further, Table-3 shows the average score for anxiety (Pre-test control group) were M= 12.56, S.D.= 2.79, and the score for anxiety (Pre-test experimental group) was M= 15.34, S.D.= 3.97 depicted that again experimental group is experiencing high level of anxiety as compared to their control group counterparts. Therefore, hypothesis No.2 which states that "there would be a significant difference in the level of anxiety among pre-test and post-test, control vs experimental groups of university students" is accepted.

Likewise, in the table-3 the values for stress pre-test control group were M= 21.62, S.D.= 3.29, and the values for stress pre-test experimental group was M= 25.94, S.D.= 4.35 denotes that experimental group participants have shown high level of stress as compared to their control group counterparts. Therefore, the hypothesis No.3 which states that "there would be a significant difference in the level of stress among pre-test and post-test, control vs experimental groups of university students" is accepted.

Table-3 shows the mean values for post-test, after the introduction of treatment (i.e., Gurbani music intervention to experimental group the mean values for depression post-test control group were M= 14.72, S.D.= 3,38 and the values for depression post-test experimental group was M= 12.42, S.D.= 3.68. This shows that there is a decline in the level of depression after the introduction of Gurbani music intervention to experimental group as compared to control group participants who were not given any kind of treatment. Secondly, the values for anxiety post-test control group were M= 10.90, S.D.= 2.46, and the values for anxiety post-test experimental group was M= 8.92, S.D. =2.23 again shows the effectiveness of music intervention resulted to decrease in the level of anxiety among experimental group as compared to their control group counterparts.

Moreover, the table-3 displays the average score for stress in Post-test control group i.e., M= 19.16, S.D.= 2.54, and the values for stress post-test experimental group was M= 15.78, S.D.= 3.34, denotes that there was a reduction in the level of stress after receiving the treatment Gurbani music intervention as compared to their control group counterparts. Therefore, from the comparison of mean values it can be derived that the therapy was effective and there was a decrease in the level of depression, anxiety and stress among (Experimental Group) university students after introducing the Gurbani music intervention.
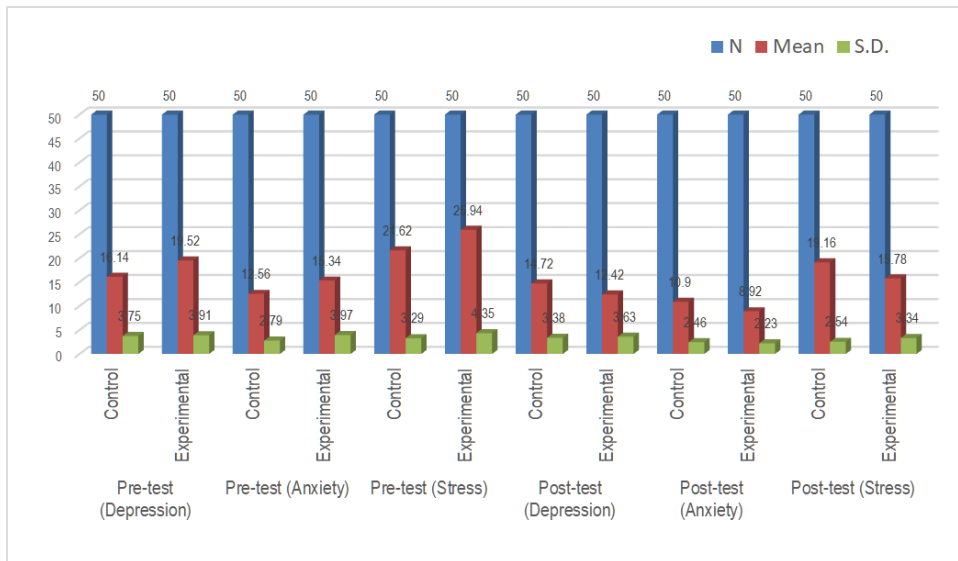
Figure. 1: Mean Values for the impact of Gurbani music intervention on Pre and Post-test Depression, Anxiety and Stress among University Students

ONE WAY ANOVA (ANALYSIS OF VARIANCE)

A One Way ANOVA Performed to observe the impact of Gurbani Music Intervention (Gurbani Music) on Depression among Pre-test (Control and experimental) and Post-test (Control and experimental) Groups of University Students

Table 4

Source	SS	Df	Ms	F	P
Total	1614.36	99			
Groups (C × E)	696.96	1	696.96	74.45	<.01
Error	917.4	98	9.361		

*Notation: DV: Depression; IV: *Gurbani* music intervention Groups: Pre-test -Control and Exp; Post-test- Control and Exp; SS= Sum of Square, Df= Degree of Freedom, Ms= Mean Square, Level of significance= p=.01 and .05.

Table 4: Showed the impact of Gurbani music intervention on depression for Pre-test (Control and experimental) and Post-test (Control and experimental) Groups of University Students. From table 4. it is quite evident that the main effect of Gurbani music intervention on depression for pre-test (control vs experimental groups) and post-test (control vs experimental groups) was found $F(1, 98) = 74.45$, p= 0.00 <.01 which shows significant difference between pre and post-test groups statistically. Therefore, hypothesis No. 4 which states that "there would be a significant impact of Gurbani music intervention in the management of depression among pre-test and post-test among university students" is accepted. More appropriately the mean score of for pre and post-test supports the same. The mean score for depression on pre-test

was M= 16.14, S.D.= 3.75 for control group and M= 19.52, S.D.= 3.91 for experimental group. Whereas the average score of the post-test groups M= 14.72, S.D.= 3.38 for control group and M= 12.42, S.D.= 3.63 for experimental group shows the significant difference in both the groups. It denotes that there is a substantial difference between experimental group levels of depression and non-treated or control group levels of depression in response to Gurbani Music intervention. After receiving treatment, a considerable decline in depression was seen, compared to a less pronounced decline in depression of the control group.

A ONE WAY ANOVA PERFORMED TO OBSERVE THE IMPACT OF GURBANI MUSIC INTERVENTION ON ANXIETY AMONG UNIVERSITY STUDENTS

Table 5

Source	SS	*Df*	*Ms*	*F*	Sig.
Corrected Model	1461.36	99			
Groups (C × E)	547.56	1	547.56	58.72	P<.01
Error	913.8	98	9.324		

*Notation: DV: Anxiety; IV: *Gurbani* music intervention Groups: Pre-test -Control and Exp; Post-test- Control and Exp; SS= Sum of Square, Df= Degree of Freedom, Ms= Mean Square, Level of significance= p=.01 and .05.

Table 5: Showed the impact of Gurbani music intervention on anxiety for Pre-test (Control and experimental) and Post-test (Control and experimental) Groups of University Students. Table 5. Showed that the main effect of Gurbani music intervention on anxiety for pre-test (control vs experimental groups) and post-test (control vs experimental groups) was found $F_{(1, 98)} = 58.72$, p= 0.00 <.01 which shows significant difference between pre and post-test groups statistically. Therefore, hypothesis No. 5 which states that "There would be a significant impact of Gurbani music intervention in the management of anxiety among pre-test and post-test among university students." is accepted. More appropriately, the mean score of for pre and post-test supports the same. The mean score for anxiety on pre-test was M= 12.56, S.D.= 2.79 for control group and M= 15.34, S.D.= 3.97 for experimental group, whereas the average score of the post-test groups M= 10.90, S.D.=2.46 for control group and M= 8.92, S.D.= 2.23 for experimental group shows the significant difference in both the groups. This indicates that there is a substantial difference between experimental group students and non-treated or control group university students in the effect of Gurbani music intervention on the degree of anxiety. After receiving the treatment, there was a discernible decrease in anxiety levels, compared to the control group.

A ONE WAY ANOVA PERFORMED TO OBSERVE THE IMPACT OF GURBANI MUSIC INTERVENTION ON STRESS AMONG UNIVERSITY STUDENTS

Table 6

Source	SS	*Df*	*Ms*	*F*	Sig.
Corrected Model	2554.19	99			
Groups (C × E)	1406.25	1	1406.25	120.05	P<.01
Error	1147.94	98	11.714		

*Notation: DV: Stress; IV: *Gurbani* music intervention Groups: Pre-test -Control and Exp; Post-test- Control and Exp; SS= Sum of Square, Df= Degree of Freedom, Ms= Mean Square, Level of significance= p=.01 and .05.

Table 6: Showed the impact of Gurbani music intervention on stress for Pre-test (Control and experimental) and Post-test (Control and experimental) Groups of University Students. Table 6. Showed that the main effect of Gurbani music intervention on stress levels for pre-test (control vs experimental groups) and post-test (control vs experimental groups) was found $F_{(1, 98)} = 120.05$, p= 0.00 <.01 which shows significant difference between pre and post-test groups statistically. Therefore, hypothesis No. 6 which states that "there would be a significant impact of Gurbani music intervention in the management of stress among pre-test and post-test among university students." is accepted. More appropriately, the mean score for pre and post-test supports the same. The mean score for stress on pre-test was M= 21.62, S.D.= 3.29 for control group and M= 15.34, S.D.= 3.97 for experimental group, whereas the average score of the post-test groups M= 19.16, S.D.= 2.54 for control group and M= 15.78, S.D.= 3.34 for experimental group shows the significant difference in both the groups. It denotes that, when compared to university students who received no treatment or were in the control group, Gurbani music intervention had a substantial impact on the students in the experimental group's level of stress. After receiving the treatment, there was a discernible decline in stress levels, compared to the less pronounced decline in stress levels in the control group.

FINDINGS

- The effect of Gurbani music intervention (8 weeks) on depression for pre and post-test showed a significant difference. After the Gurbani music intervention, a considerable decline in depression was found.

- With Gurbani music intervention, there was a discernible decrease in anxiety levels.

- After receiving the treatment, there was a discernible decline in stress levels, compared to the less pronounced decline in stress levels.

DISCUSSION OF THE RESUTS AND FULFILLMENT OF OBJECTIVES

- The first aim of the present study was to sought the answer whether there is a difference in the level of stress, anxiety and depression among pre-test and post-test group university students. Findings obtained from the mean scores indicated that there is a significant difference among pre and post-test groups in the level of stress, anxiety and depression among university students.

- The second aim of the research was to observe the impact of Gurbani music intervention in the management of stress, anxiety and depression among pre-test and post-test among university students. The results derived from the One Way ANOVA indicated that introducing Gurbani music intervention has considerable impact in reducing the stress, anxiety and depression among pre-test and post-test group students.

These results are consistent with the previous findings that have found a difference among pre and post-test groups and introduction of music intervention exerts significant impact on stress, anxiety and depression (Gagandeep Kaur, 20219; Lucio Dell Atti, 202110; Farnaz Dehkhoda, 201811; Bahman Salehi, 201612; Sharma Richa, 201313; Raji K, 201314; Jaspreet Kaur, 201215; Upkiran Kaur, 201216;)

CONCLUSION

In light of the study's findings, it must be drawn that Gurbani music intervention is an effective technique to reduce the levels of stress, anxiety and depression and this technique must be included in effective therapy techniques to cater the issues of mental health problems among students in particular and other people in general to improve their overall wellbeing. The current study humbly recommends and suggest that policymakers, educational institution administrators and established medical practitioners, psychologists and music therapists to develop a policy that employs Gurbani music therapy in their counselling sessions to treat the mental health issues for students at school, college and university levels and for general public too enabling them to lead a healthy, stress free, fearless and quality life style.

REFERENCES

1. Stress & stress management, produced by Klinic Community Health Centre, pg. 3
2. American Psychiatric Association, (2000). Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition), Text Revision. Washington, DC: American Psychiatric Association.
3. Smith, Melinda. (2008). Anxiety attacks and disorders: Guide to the signs, symptoms, and treatment options. Website: http://www.l1elpguide.0rg/mental/c anxiety_types_symptoms_treatment.htm
4. Sonny Dr. Parmodh shankar, Relief to depression

5. Davis, W.B., G feller, K.E., Thaut, M.H. (1987). An introduction to music therapy theory and practice Boston.
6. Varshnay, S.C. (2008, Aug). Sangeet Chikitsa. Sangeet, 8-11.
7. https://youtu.be/Qr5qmP_dDy4
8. Raj Academy - YouTube
9. Kaur Gagandeep, Kaur Prof. (Dr) Gurpreet Kaur, (2021), Effectiveness of music and yoga interventions in the management of insomnia, Ph.D thesis, Guru Nanak Dev University Amritsar.
10. Lucio Dell Atti (2021). Impact of music on anxiety and pain perception among men undergoing prostate biopsy: Synthesis of qualitative literature. Complementary Therapies in Clinical Practice, 43, 101330.
11. Dehkhoda Farnaz (2018) "The effect of music therapy on anxiety, pain, fatigue, sleep quality and affect in oncology inpatients" Ph.D thesis, Panjab university, Chandigarh.
12. Bahman Salehi a, Mona Salehi b, Kaivan Nsirniac, Parvin Soltani d, Mahnaz Adalatnaghadd, Nasim Kalantari e, Fariba Gheblehf Shadi Moghaddam (2016), The effects of selected relaxing music on anxiety and depression during hemodialysis: A randomized crossover controlled clinical trial study.
13. Sharma Richa, Dr. Simmi R. Singh. (2013), "Impact of Indian Music on Anxiety and Stress Level at Adolescent Stage of Human Development" Ph.D Thesis, Punjab University, Chandigarh
14. Raji K, Dr. M. Jayagovri, (2013) "A Study to Assess the Effectiveness of Music Therapy and Muscle Relaxation Technique on Pain, Anxiety and Physiological Parameters among Patients Undergoing Cardiac Surgery in the Selected Hospitals at Coimbatore" Ph.d Thesis, (Medicine), Annamalai University
15. Kaur Jaspreet, Dr. Tejinder Gulati (2012), "Music as Therapy for the Patients of Depression" M.phil Dissertation Guru Nank Dev University Amritsar.
16. Kaur Upkiran, Dr. Rajesh Sharma (2012), "A Study of the Impact of Trait Anxiety and Sex on the Academic Motivation of Music Students of Punjab" M. Phil Dissertation, Guru Nanak Dev University Amritsar.