Effect of Music on Mental Conditions

Shveata Misra* and Ina Shastri

Department Of Music, Banasthali University, Rajasthan, India.

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Abstract
People express their feelings at different places differently. In the same way they express their emotions in various ways in various places through the medium of sound waves and music. Sometimes music was considered to be a means of recreation only. But the scientists have now proved that there is such power in the rhythm and sound waves of music which imparting physical and mental benefit ordinarily makes the soul upstart. The music occupies an important stage to recreate human life. Music is not only recreational, if it is enlivened with emotions and inspirations, its result may be fulfilling the vast atmosphere with the greater circumstances besides the audience.

Keyword: Anxiety, Depression, Effect, Hysteria, Mental Conditions, Music, Phobia Psychoses, Psychoneuroses.

INTRODUCTION

Classification of Mental Diseases

We cannot keep all the patient suffering from mental diseases in one category. We classify them according to their symptoms. These diseases can be classified into two main categories viz:

PSYCHONEUROSES

Meaning of Psychoneuroses

This is a lighter type of mental defects pertaining to intellectual, emotional and process related problems. The defects pertain to the mind and nerves in which the patient is sick mentally, but possesses full knowledge about the atmosphere around him. The person becomes partially incapable of work and his fundamental symptoms are anxiety. The feelings of anxiety, incapability, inferiority, are found in this. These patients are often lost in their own thoughts. They remain tense and lack intermission. Trouble, dissatisfaction, tiresomeness etc. other symptoms are found in them.

Meaning of Mental Defects

The personality of the person suffering from this disease is very much disintegrated. The patient is not aware of reality. There is a total lack of self discipline and social balance and often roams in a world of imagination. From a legal point of view they are termed as insane. There is an excess of illusion and hallucination in them and they do not care for reform or getting cured. Their personality is totally disintegrated.

Kinds of Psychoneuroses

The Psychoneuroses have been divided into the following kinds:

i). Anxiety Psychoneuroses

The main symptom of anxiety neurosis is fear because anxiety generates through the medium of fear. According to the Coleman “The main symptom of this disease is
independent directionless anxiety which generates neither from some matter or neither situation, nor the patient has any knowledge of its particular aim or situation. According to Fisher: “Neurotic Anxiety is a reaction to unapproachable inner or subjective difficulties of which the individual has no idea”.

The quality of anxiety in such patients is light or durable. There are frequent attacks of anxiety whose duration is from some seconds to an hour. Anxiety reaction is the most common form of Psychoneurosis a series of symptoms which arises from the faulty adaptations to the stresses and strains of life. It is caused by overreaction in an attempt to meet these difficulties. It is characterized primarily by diffuse, free floating anxiety, which does not seem to stem from or be directed towards any particular situation of objects.

ii). Obsessive Compulsive Psychoneuroses

Two main symptoms of obsessive men and compulsiveness are found in this disease. The patient suffers from the useless, illogical and obstructive thoughts. He cannot remove these thoughts from his mind knowing that there are useless and illogical. There is a strong inspiration in the patient to feel to do some hereditary thing repeatedly. He does some actions repeatedly for instance counting of money, shrugging of shoulders washing hands, showing tongue, etc. A patient repeats the same actions which are useless and illogical. He has no control over these actions. Obsessive compulsive reactions consist of apparently useless, but irresistible repetitious acts, words or thoughts, whose aim is to reduce tension and anxiety:

a). By indulging in something forbidden
b). By denying such indulgence or guarding against it or

c). By punishing oneself for having had the impulse to indulge

Obsessions are spontaneously recurring ideas and thoughts over which individual has no voluntary control. Compulsions are irresistible impulses to perform certain acts of repetitive, ritualistic nature, such as hand washing, money, and facial ties dusting and sign reading.

iii). Hysteria

When a person is unable to face many problems of life, to escape these, he resorts to flight into incapacity, starts doing such actions that are unnatural and unrealistic. Being troubled, he falls down, faints suffer from fits and is paralyzed due to fear. Rising from sleep does difficult actions, but in the morning he forgets the actions of the night. Fugue, Amnesia and dual personality, etc. other symptoms are found in such a patient. Hysterical reactions are essentially spontaneous, unpremeditated attempts to circumvent or adjust to life difficulties through flight into incapacity. When person is incapable of facing many problems of life, he escapes into a flight into incapacity and the symptoms of these diseases develop in him.

iv). Phobia

This is a kind of illogical abnormal behaviour or fear. The patient knows that this fear for a particular object and situation is unfounded; even then he is unable to leave it. According to Cameron: “A Phobic reaction is an attempt to reduce, internally generated tension and anxiety through the process of displacement, projection and avoidance”. Phobic generally starts from some traumatic events which are related to childhood. The connection of the patient’s traumatic experiences is related to some prohibited or shameful act. This Phobia may be of several kinds:

1). Agora Phobia
2). Acrophobia
3). Claustrophobia
4). Ocholohobia
5). Hemato Phobia
6). Toxo Phobia
7). Patho Phobia
8). Locomotion Phobia

In proper fear is found in all of us, but up to a limited extent. In the patient suffering phobia, the illogical fear is in intense severity and it is obstructed in the functions of their daily life. Though they know that there is no real cause for their fear but they are unable to protect themselves from this situation, they remain excessively tense.

A phobia is peculiar fears that the patient realizes are absurd, but is unable to explain or overcome. According to Coleman: “The permanent fear towards some object or situation which has no actual danger to the patient or in which the danger is magnified out of all proportions to its actual seriousness”.

v). Asthenic Reaction or Neurasthenia

Neurasthenia emerges as a result of constantly misadjusted emotional reactions. Due to long mental and physical tiresomeness in a person, he becomes peevish and lazy. His thinking also becomes disjointed, his chain of thoughts is also disrupted, and he always feels tired. Symptoms of headache, sadness, indigestion and idleness found in him. The other types of Neurasthenia are as under:

a). Dissociative Reactions
b). Amnesia
c). Fugue Stage
PSYCHOSES

Psychoses are that serious and severe stage where a patient's mental and physical activity is disrupted and his capacity of adjustment to the society also ceases. Their harmonious balance is completely disrupted. There remains no connection amongst his Id, Ego and superego and outward reality.

There is no difference of kind in psychoses and psychoneurosis but there is a difference in intensity and degree. Psychoses are major personality disorders marked by profound mental and emotional disruptions that render a previously normal individual incapable of adequate self management or adjustment to society. Such patients have delusion hallucination, incompatibility and thought and language, etc. lack of sociability and self consciousness.

Psychosis

A disturbance in mental and emotional behaviour usually to an extent that is incompatible with social adjustment and often accompanied by delusions and hallucinations, disturbance of relation with or perception of reality.

Classification of Psychoses:

Organic or Toxic Psychoses

- General Paresis Psychoses
- Senile Dementia Psychoses
- Cerebral Arteriosclerosis
- Alcoholic Psychoses
- Psychoses Due to drugs
- Psychoses due to metals
- Chorea Psychoses
- Epilepsy

Functional Psychoses

- Schizophrenia
- Manic Depressive Psychoses
- Paranoia
- Other functional Psychoses
- Involution Melancholia
- Paranoid State
- Depressive Psychotic Reactions etc.
are found in such patients. Schizophrenia is a general term referring to a group of severe mental disorders by a splitting, or disintegration of the personality. It's some main kinds are:

1. Simple Schizophrenia or Acute Undifferentiated Schizophrenia
2. Hebephrenic Schizophrenia
3. Catatonic Schizophrenia
4. Paranoid Schizophrenia
5. Childhood Schizophrenia

A patient suffering from paranoia becomes suspicious, very peevish, selfish and self centered. The delusions in this disease are of a permanent nature. A patient suffering from Hypochondriac Paranoia feels that he is suffering from some incurable disease. In the Persecutory Paranoia, there is the delusion of punishment. The patient has a firm belief that someone is bent upon punishing him and all are his enemies. In the Greatness Paranoia a person thinks himself to be the highest and greatest. He considers himself to be a great man. In Religion Paranoia the person considers himself to be the
incarnation of GOD.

Paranoid reactions are attempts to escape from tension and anxiety through the processes of denial and projection, which result in more or less systematized delusions. Paranoia is a constitutional mental disorder that is limited in symptomatology to well systematized and stable delusions of persecution and grandeur.

Patients suffering from Involution Melancholia are very sad, afraid, deserted, restless, weeping without cause and suffer from insomnia. This disease happens in the age group of 50-55 years the patient considers himself a great sinner and criminal. In the Paranoid state the delusion are main. The patient relationship with the reality deteriorates creeps in his personality. But like psychosis, his personality is not disintegrated nor like the paranoiac, the delusions develop too much.

Psychotic Depressive Reactions

This is a kind of emotional psychosis. Depression is found in the patient in a grave state symptom of delusion and hallucination, one found rather in a more serious state.

Psychosomatic Disorders" are the base of symptoms of this disease is physical and physical organs are affected. But in the root there are the following kinds:

1. Psycho physiological Reactions
2. Psycho physiological Muscular-skeletal Reactions
3. Psycho physiological Respiratory Reactions
4. Psycho-physiological Gastrointestinal Reactions
5. Psycho-physiological Nervous system Reactions

Thus Psycho-physiological reactions is that state in which due to long term tensions the person experiences many types of physical ailments. Its symptom emerges suddenly and decreases slowly or end. In these disorders the patient reacts to stress, tension and anxiety with direct physiological malfunction, which may lead to irreversible organ or tissue damage. Let's have a look on how music affects the development of infants.

An Experiment with Infants

Now to check the infant’s right frontal EEG activation, which shows negative stimuli and left frontal EEG activation, which shows positive stimuli, we recently recorded the EEG and ECG of 3, 6,9,12 month old infants who are made to hear the joy, fear, and sad orchestral excerpts (to trace the responses that would show the same asymmetric effects for emotions if induced by music or not). But before we proceed further with the experiments and conclusion let us see the four categories of Brain Wave Pattern which are as follows:

1). Alpha – 8-13.9 Hz
2). Beta – 14-30 Hz
3). Delta - .1-3.9 Hz
4). Theta – 4 – 7.9 Hz

According to the above graph the infant’s alpha band activity (4-8 Hz) was recorded and activation was taken as the inverse of this measure. There were interesting changes across. Compared to the baseline, the presence of music significantly increased brain activity at 3 months of age, had little effect at 6 and 9th month of age and significantly attenuated brain activity at 12 months of age, suggesting that music is having a calming effect by 12 months as infants are increasingly able to regulate their sensory input. However, no left/right asymmetries were found in any condition.

There are a number of possible reasons for the lack of asymmetric responses to musical emotion in infants. It is possible that musical emotion is being processed differently than other emotions in infancy, but this would be surprising given the behavioural evidence for a central role of a musical emotion in everyday infant care giving activities. Another possibility is that the orchestral musical excerpts used were simply too complex for infants. While it is advantageous to use the same musical excerpts with infants and adults, this music is certainly not very similar to typical infant directed the singing. Still another explanation is that sufficient frontal lobe maturation for the cognitive appraisal of musical stimuli is yet not developed in the first year of life.

To address these possibilities, studies are underway to measure infant EEG with more ecologically valid stimuli. In particular, we are using vocal singing, infant directed speech and infant directed speech for conveying various emotions. At this point it is not possible to answer the questions of whether infants process musical emotions with similar brain circuits to those used for other emotions, or whether infants and adults use similar brain circuits to process musical emotion. However, methodologies now exist to ask these questions and hopefully more data will be forthcoming.

CONCLUSION

The popular notion that music elicits powerful emotions appear to be close to the truth, that music is not only about emotion, but that it elicits emotion directly can be seen clearly from the physiological responses it induces. The changes in heart rate, respiration rate, blood flow, skin conductance are clear indications that music activates the phylogenetically old parts of the nervous system and that music elicits a cascade of subconscious activity. Music also appears to activate the cortical systems associated with the emotion, including circuits in the frontal lobes. For adults in the modern world music does not command the same approach/withdrawal
reactions as other emotion laden stimuli, many evidences suggests that music does activate the same cortical sub cortical and autonomic circuits as other emotions. But the answer to the question that appears here is why music appears to activate the essential survival circuits to the nervous system, when the music does not appear to serve any obvious survival function – lies in the evolution of development and child care. Human infants are particularly helpless for an extended period of time and are reliant to their care givers for survival.

An emotional bond and the communication of positive and prohibitionary emotional information are essential for survival. Perhaps music evolved in order to further emotional communication between infants and caregivers. And perhaps infant directed singing and infant directed musical speech are intimately connected with an approach and withdrawal behaviour on the part of the infant. Taking this one step further, as children develop other means of communication such as language and as they learn to keep overt expressions of emotion under control, music may go underground. Music still elicits emotion, but more directed and precise methods of emotional communication can occur with language. Perhaps, however, the music retain a survival role in adults in that it allows the practice of feeling emotions without having to risk the consequences of acting on these emotions. Thus we are free to laugh and cry on music, to feel our heart race, to feel chills, and to hold our breath and perhaps ones again to feel like the infant who is exquisitely tuned to the emotion in its mother’s voice.

TREATMENT OF MENTAL ILLNESS IN VARIOUS COUNTRIES THROUGH MUSIC

About four thousand years ago the priests of Egypt believed that music helped in removing the sterility among the women. The ancient Hebrews also used music in curing various diseases. Plato and Aristotle have also emphasized that music helps in maintaining mental and physical health. The first use of music as therapeutic modality is attributed to Zenocrates, Sarpender, and Arion, ancient Greeks with modern ideas, who used harp music to curb the wild outbursts of the violent mentally disturbed.

A person expresses his comforts and sorrows through the medium of music. Music is a medium through which we express our feelings of joy and sorrow, love and patriotism, penitence and praise. It is the charm of the soul, the instrument that lifts the mind to higher regions, the gateway into the realms of imagination. It makes the eyes sparkle, the pulse beat more quickly. It causes emotions to pass over our being like waves over the far reaching sea.

Music is not only a verse composition. Many tunes are enjoined on it. These tunes are not only to give sweetness to the ears, but have been constructed to spread waves of the tunes. Their aims are also spiritual. At the same time there are also the qualities of enhancing the physical and mental health. They are also used for treatment.

Among the workers of the yajnas an udgata was also appointed, he would sing the mantras of those tunes for which the yajnas was performed. The exponents of this knowledge now are very rare. This is at the brink of extinction. It is being revised a fresh and it is being observed as to which tune casts which effect on men, animals, vegetation, and atmosphere, during the last century, the Raga lightening the extinguished lamp viz. The Deepak Raga, the Megh Malhar Raga, causing the clouds to rain, the Mriga Raga making the deer and other beasts spell bound, the Sarp Raga making the snakes come out of their holes and dance etc. were much in vogue. Of their only the Sarpa Raga is the safe with the snake charmers now. The scientists have discovered such tuning currents waves, through which the mulch animals yield more milk. The crops, proper soon, the war drums used to be previously too of special type. Even now the bands are playing on specific tunes to encourage the soldiers. Some doctors, psychologists and musicians together have made such observations as to which sound current will be useful in which disease. On this basis music therapy is becoming an independent science.

Music is introduced along with medicines in many hospitals in the western countries. Several doctors treat with pure music and maintain that this method is so potent that it can produce alone wonderful results. There is no need to magnify the medicines using along with the music. Dr. Ludwin of Munich has established a music hospital for mental patients particularly for adolescent children. We are not only the diseases are treated, but also their bad habits are removed with special sound waves. Psychotherapist Peter Newman and Michel Sanders have jointly started such a hospital in which with the treatment of mental diseases musical instruments have also been included. It is now gaining more success.

The Russian scientist Prof. S.B Kodaf is engaged, in this research only. But he is now convinced with the experience that music therapy is more specifically efficient for nervous diseases. The music experiment of Dr. Banker in the Chicago Mental hospital has been much successful. Dr. Wordman and Brokling have experienced good effects of music at the time of surgical operations. In U.S.A, France, West Germany and Japan the music therapy has become normal. It is being used not only for treatment but also as a source of energy for the physically and mentally weak person. At the present research is at the beginning stage but it is hoped that it will develop as an independent science and not only for the patients but will also prove much useful for agriculture and mulching animals.

There are great expectations from music therapy for the common people to provide the recreation and remove tensions and blood pressure treatment and progress on
two different aspects yet there is a close relationship between the two. Music is being counted in the category of exercise and methods are being discovered, which will not only increase health but also happiness. Happiness is the mental treatment which develops all the three aspects imaginativeness, intellect and talent. After finding this right and well tested, this has been declared as the necessary part of education in Japan along with physical exercise. Besides the political differences between the West and East Germany, both are unanimous on the one point that music is not only a thing of recreation and luxury, but it is also a good method of enhancing the mental health and talent.

These days people suffering from mental and physical ailments are being treated in the whole of the world. In Hanover of West Germany a dentist named Dr. Herbert Butner used music while treating tooth pain. People feel much pain during the treatment due to tension, therefore Dr. Butner made them available their favourite music through earphones, which diverted their attentions towards the music and they felt the painless and the mental tension. During the war period an American doctor made new experiments on music.

This doctor treated those patients successfully who were tense, mentally weak due to the war atmosphere and had fallen victim to fear, sorrow, etc., in the hospitals of western countries during the time of surgical operations composition of classical music has been used successfully. In the French institution of Blood Transfusion at the time of blood donation, the patient does not feel any pain due to music treatment. It has been found that during blood donations, patient falling unconscious, remained quiet and stable. At the time of surgery, anaesthesia is lessened and music is introduced. In a difficult surgical operation of intestine the patient was treated with classical music instead of anaesthesia. It has been told authoritatively that this operation became easy and successful due to music. It has been known from the researches and observations of the western scholars that the music compositions of artists like Beethoven, Chapeen, Vauhsa, have been proved more useful in this regard. Dr. Bender of Bellevue Hospital has used the music in mental diseases of the children.

Dr. Lauretta, S. Bender head of the children psychiatric ward at Bellevue Hospital believes that music therapy reaches the child’s brain closed to other group therapy treatments such as plastic and visual arts, dramatics and play activities. She has published several case histories which indicate that music may divert potential criminals into normal pathways. The famous American Psychiatrist Dr. George Stevosous and Dr. Vincent Paul have suggested music discipline to be the inevitable medicine for the removal of the mental tensions. Several experiments are being made in the west at present, to cure diseases through music. Music is being successful for the treatment of mental patients.

In Psychoses including general paresis, alcoholism, arteriosclerotic disorders, senility, evolutionary melancholia, manic depression and schizophrenia, the use of music is often very effective. The diagnosis of the etiological factors of the psychoses and the psycho neuroses can be aided by the use of music. Through the medium of conscious self-expression in music elements of the patients conflict may become manifest. Dr. Mead of England and Dr. Podolasky of U.S.A have proved that through music, the pulse system gains the kind of energy through which all the dirty matter of the body is discharged and the body becomes healthy and without disease.

In the Soviet Russian Hospital Dr. S.P. Facuf told the effect of the music useful on defective pulse system. Dr. Walter H. Walse found music useful in removing diseases like, cold, jaundice, indigestion, liver and blood pressure etc. The German psychiatrist Dr. Walter Kuge found useful in the treatment of mental defects. Dr. S.J. Lodan of U.S.A after testing singer’s instrument players found that fall sick, less than others.

In the same way music was introduced in the nurseries and was found useful in encouraging and stimulating the women and their infants. Music also has its role in recovering the downcastness of the people suffering from the other ailments. Playing of instruments diverts the attention of the patients from their diseases towards music and this lessens his tension. The Krigia Health Centre in Russia has accepted music also an effort along with medicine treatment. Music is also useful in such diseases, as insomnia, downcastness, and whim etc. mental diseases. Dr. Brolde Iver has written in his article that the possibilities of health protection and longevity increase with music. The famous physician of New York Dr. Edward Polasky has immensely succeeded in strengthening the lungs and managing the blood circulation by teaching his patients singing. According to him music is a comfortable and soft exercise for protection of health. Child, old, weak, and healthy all are benefited by music.

Golman and Morinan the Greek physicians were famous musicians of their time and lessened the pain of the patients by the various ascent and descent of singing and playing of instrument in severe diseases.

In the book named the gland regulating personality: Dr. Luis Bermon has written that due to improper ratio in the secretion from the thyroid gland the thyroxin near the throat tube balance of the blood pressure gets disturbed and the heat and the circulation of the blood affected, which causes the physical and mental disturbance. He has mentioned this in the chapter hyperthyroidism and expressed his opinion that the thyroxin secretion can be controlled through music sound science. The healing effect of music, it is a demonstrated fact that fast music also quickens the pulse and that music can influence both blood pressure and heart rhythm in terms of ECG modification.
TREATMENT OF MENTAL ILLNESS IN INDIA THROUGH MUSIC

In India too, success has been gained to treat various mental diseases through music. Due to horrific result on the mind of some event, emotions etc. when a person loses balance, diseases can be cured with the help of music by lessening the excitement of the mind. Music can ameliorate the tense state of mind and make it healthier and change the abnormality into normality. There is a psychiatrist in Miraj who has cured many patients with music. During the treatment of diseases playing on folk tunes of bhakti music is more appropriate.

Hearing the music a person’s suppressed feelings burst out. In history a legend is famous about king Shershah. Shershah has given shelter to many good musicians. He suffered from headache but no treatment was responding. He had invented only one medicine for ailment and that was sunshot. At the beginning of the headache the musicians were invited. It is not known as to singing by which raga his headache lessened. But it was certain that it deteriorates with hearing the classical music.

Indian scientist inventor Dr. V. Gore has proved that by speculating the swar (sound) of Asawari Raga, impotency can be eliminated with Raga Puria the malady of blood pressure can be controlled. Some children possess weak memory and their concentration is also weak. The treatment of such children is being attempted with music and their intellect developed and much success has been gained in it. It has also been propounded in the vedic sciences that the swara(sound) diseases resistance power.

It is stated in the ancient Aryved that the imbalance among the three elements, vat, pitt, kaf causes diseases. There are many reasons for this imbalance in three elements, in which imbalanced and restlessness of mind is the main reason. Those whose minds are restless and full of commotion due to anxiety, sorrow, fear, anger etc. passions suffer from mental imbalance and in the elements and suffer from diseases. Music efforts peace to the mind and the passion of sex, anger, sorrow etc are also pacified. When the mind is pacified the elements of vat, pitt, kaf are also normal. The imbalance in the elements are normalised on the peace of mind and all the diseases are cured and a man becomes healthy and sans diseases. Thus constant swar (sound) discipline even a chronic diseased person can regain health and fitness.

Dr. J Paul has thrown vivid light on the efficiency of various ragas on the treatment of different diseases in his book Sangeth chikitsa music therapy. Instead of chloroform, the nerves of mind can be brought in a state of unconsciousness by any profound naad. This in respect of medicine and strength, art is usable. Drowsiness disappears instantly with the sound waves of music. There is unprecedented magic of attraction in music and peculiar capacity to reader spell bound. During the time of very painful operation (surgical) doctors have succeed through music tranquilizing the patients. Music has been found useful in the treatment of patients suffering from psychoses. This type of treatment has been tried in the National Institute of Mental health, Banglore. Through group therapy and music, Shri Murti and Styawati cured Psychoses patients.

The notable Indian study is from the National Institute of Mental Health, Banglore. Group discussion technique and music were used for two male groups and female groups of schizophrenias. H.N. Murthy and Satya Wathy found the improvement in the patients. In their other shiday, they used group activity which included Bhajans, group games, dramas, music competitions, sports and other entertainment programs. Group activity was conducted regularly for few months. They reported improvement in the mental illness of the patients.

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