

# Effect of Music Therapy on Psychological Health of Cancer Patients

Ms. Tanupreet Singh\*

Vivekananda Journal of Research  
 July - December 2020, Vol. 9, Issue 2, 168-176  
 ISSN 2319-8702(Print)  
 ISSN 2456-7574(Online)  
 Peer Reviewed Refereed Journal  
 © Vivekananda Institute of Professional Studies  
<http://www.vips.edu/vjr.php>



## Abstract

*Cancer is believed to be one of the most dangerous diseases afflicting people. It is an abnormal growth of the cells turning into a tumour and spreading into the other parts of the body at a fast pace. After heart disease or cardiac arrest, it is regarded the second common cause of death. Music is generally considered not only vital in the process of soothing or relaxation to the body but music therapy in speciality is seen as an evidence-based clinical intervention that, along with medication, helps to improve the quality of life and wellbeing of clinical patients. According to Bruscia (1991) music therapy as 'an interpersonal process in which the therapist uses music and all of its facets to help patients to improve, restore or maintain health.' On the other hand, music therapy is an expressive art therapy that makes the use of music to enhance the physical and psychological health of an individual. Thus, music has a great impact on cancer patients in their treatment which includes the regular medication and nonpharmacological therapies such as 'music therapy'.*

**Keywords:** *Cancer, music therapy, health, clinical intervention.*

## INTRODUCTION

Cancer is referred to as the abnormal growth of cells anywhere in the body. There are, approximately, about 200 different kinds and types of cancers that can develop in a body. This abnormal growth of cells is known as cancer cells, malignant cells, or more often termed as tumour. Cancer is a disease which is not just confined to humans, but also

\* Assistant Professor, Department of Psychology, Akal University, Talwandi Sabo, Bathinda, Punjab.  
 Email: [tanupreet\\_psy@auts.ac.in](mailto:tanupreet_psy@auts.ac.in)

animals and other living organisms. Along with the other diseases, cancer stands at the second place which is the leading cause of death worldwide. According to the World Health Organisation (WHO, 2018), cancer is responsible for around 9.6 million deaths globally. An appraisal of the mortality rate due to cancer suggests that Australia, followed by New Zealand and Ireland, are the topmost countries suffering from cancer. According to the latest report by the World Health Organisation (WHO), it is estimated that 1.16 million cases were added in 2018. The most common kinds of cancers found among the women that hit the population are breast, colorectal, lung, cervical and thyroid cancer whereas, lung, prostate, colorectal, stomach and liver cancer are the types highly found in men.

The burden of cancer continues to grow globally and rapidly at a high rate exerting terrible physical illness and disability, socio-emotional, psychological and financial strain associated with cancer (Osoba et al., 2006). It does not have an adverse effect only on the individuals suffering but also the associated families, communities and health systems. Numerous health related systems and centres in developing and low-middle-income countries are the least prepared to manage the burden of health-related issues, and massive number of cancer sufferers globally do not have a proper and adequate access to timely quality diagnosis and treatment. Cancer is not only a complex disease, but the diagnosis of it is more commonly life threatening and is linked with fundamentally physical, emotional and psychological strains and stress. Cancer is observed to be at the second highest rank that is the main leading cause of death after cardiovascular disease in modern Western countries (International Agency for Research on Cancer, 2008). Cancer patients usually experience high level of emotional distress even after the treatment is done where it leaves a great impact on immunity and endocrine functioning of the body ultimately resulting in the decline in the quality of life.

Looking at the past decade, it is observed that the only cure and treatment of cancer in the early stages is the life-long medication of the patients along with the painful therapies such as chemotherapy, radiation therapy, surgery, hormone therapy and immunotherapy. In a trend, a different number of non-pharmacological treatments have been proposed for cancer patients, including various therapies such as art therapy, music therapy, dance/movement therapy, creative visualization, guided imagery and meditation and creative arts. One of the most successful and highly beneficial powerful therapeutic non-pharmacological interventions in cancer patients is the experiment of the sensation of music. Music as an astounding and potential tool for improving the quality of life in cancer patients is well recognized. It is suggested that the use of complementary therapies along with the pharmacological interventions in Oncology can be healthful ((Bradt et al., 2011; Burns et

---

al., 2015).

From ancient times, music is believed to have therapeutic effects holistically (McClellan et al., 2012). The Greek philosopher and mathematician Pythagoras used music to cure several diseases of the body as well as of the soul and trusted in the healing nature of music (West, 2000). Moreover, nowadays, the music-based intervention offered in cancer health care centres, is known as ‘Music Medicine,’ which is not only based on the use of recorded music, but also gives specialised health professionals the opportunity to benefit cancer patients with holistic care (Dileo, 2006). Cancer deteriorates social, physical and emotional well-being and its consequences are visible in a range of different levels of emotions, including anger, fear, frustration, sadness, guilt, embarrassment and shame.

The more recent researches after the conduction of vast experimentation have considered music to be akin to psychotherapy in cancer patients and accepted as a healing medium. Music therapy is regarded as a sufficient form of supporting care for patients during the long and painful treatment process of cancer. Music has been a great saviour for the programs to promote physical rehabilitation, enhancing physical and emotional well-being, manage stress and alleviate pain, and improve the quality of life. The right kind of music does not only support to overcome the negative emotions, but also helps people to rise spiritually, emotionally, socially, psychologically and physically (Magill, 2006; Rykow, 2008). As stated by the American Music Therapy Association (AMTA), “Music Therapy utilise the music to address physical, emotional, cognitive, and social needs of patients of all ages and abilities.” The qualities of music are great in the sense that it is nonverbal, structural, creative, and its emotional elements can attribute to the therapeutic relationship to promote contact, interaction, self-awareness, learning, self-expression, communication, self-esteem and confidence and personal development.

The use of music therapy in oncology entails the idea that music acts as a preventive, curative and palliative cancer care. Many studies indicate that while music therapy doesn’t have a direct link with the disease itself, it has a great impact on mood and healing power, and makes difference in the way the patient makes an effort to cope with his feelings about the disease. Music therapy highlights and focuses on both the physiological and psychological needs arising due to this disease and also the after effects and side effects of the cancer treatment simultaneously (Pothoulaki et al., 2006). The music literature gives a great evidence indicating that, on the whole, the use of music therapy is to overcome and relieve the symptoms of pain and anxiety (Magill-Levreault, 2001), the harsh effects of chemotherapy (Bozuk et al., 2006) as well as radiation therapy (O’Callaghan et al., 2007;

---

Cooper & Foster, 2008). The other aspects which are affected by music include mood disturbances, quality of life (Burns, 2001) as well as relaxation (Krout, 2007). It is highly recommended to use music therapy as a part of the complementary program in supportive care cancer institutes along with the medical treatment. While some kinds of cancer need just one medical treatment whereas the severe type of cancers may be cured or treated with the help of two or more painful treatments in combination such as surgery and chemo or radiation therapy. It is believed that music acts as a beneficial tool for positive experiences, healing, curing, optimism, self-enhancement, self-confidence and other painful symptoms.

Music therapy is categorised into two types- active also known as interactive and receptive also known as passive. Firstly, in the active form patients are engaged musically and aided to describe their experiences with the help of music; whereas in the case of receptive patients, they are made to receive music either in recorded or live form (Kenyon, 2007) which can be relaxation music, instrumental music, etc. The side effects of chemotherapy received by the patients are quite detrimental. Many patients suffer from flu, nausea, difficulty in breathing, hair fall, mood swings, negativity, and emotional breakout. Moreover, patients receiving radiation therapy experience negative psychological symptoms such as anxiety, fear, loneliness and hyper-stress. Live music can be very helpful to overcome the distress, loneliness, anxiety, fear and pain not only in the cancer patients themselves, but also in their associated families. Complimentary to music therapy other techniques such as progressive muscle relaxation and imagery techniques like guided imagery and creative visualisation can also be used. These techniques help to ease the side effects in the treatment of cancer patients such as depression, anxiety, tension, nausea and pain.

It is believed and researched that listening to music and even the production of music activates a number of regions in the brain which are involved in cognitive, sensorimotor, and emotional processing. Listening to music acts as an audio-relaxation therapy which releases the happy hormones such as oxytocin and thus increases the level of relaxation (Nilsson, 2009). Judging the benefits of this therapy, it is now introduced and used in various different sectors, specifically in general and psychiatric hospitals and also the rehabilitation centres (Stefan, 2009). A review of literature shows that patients suffering from breast cancer suffer more severe psychological symptoms and pain and are more prevalent of developing severe anxiety, depression and increases level of pain (Mehnert & Koch, 2008; Bernatzky et al., 2011).

---

## REVIEW OF LITERATURE

The review of literature stands a great support of evidence giving the descriptive and experimental studies about the positive effect of music on the psychological health of cancer patients. This idea holds that music therapy administered to patients suffering from cancer may be beneficial for both long and short term during and after the treatment. It is suggested that musical expression and notes and musical experiences and time-specific *ragas* which is greatly beneficial. Gallagher and his colleagues (2006) figured the effects of music therapy by experimenting on two hundred cancer patients as a significant improvement in the emotions, such as positive facial expressions, mood and general verbalization. Most patients and associated families had an affirmative subjective and objective feedback to music therapy.

In a pilot study by Priyadharshini Krishnaswamy & Shoba Nair in 2016, fourteen cancer patients were assessed to observe the effect of music therapy on pain and anxiety levels of cancer patients suffering with pain. The subjects were divided into control and experimental groups evenly. The results of the study showed that music therapy caused the decline in the levels of pain and anxiety in the cancer patients who were already under the dose of morphine.

A research done by Tuinmann et al., (2016) reported that patients who received a high dosage of chemotherapy as an intervention along with autologous stem cell transplant showed improvement by display the low level of pain perception. Also, the results of the study reported the positive effects on the treatment side effects with changes in immunity. Moreover, the symptoms like nausea and vomiting also decreased in the music exposed group.

Li et al., and Binns-Turner et al., in 2011 from an experimentation found that there was a significant less pain in groups who were exposed to music therapy as compared to control groups where no music therapy as such was administered to patients with breast cancer. Zhou et al., (2011) conducted a study on the survivors of cancer patients and found that with the exposure of right music the depression rate seems to decline and decrease the time period of hospital stay.

In identification of 12 clinical studies done by Boyde et al., in 2012, the mixed results of music therapy were reported and was concluded that there were both short-term improvements in both mood and relaxation along with reduced levels of exhaustion, anxiety and coping with cancer and the pain related to the same. He concluded that music therapy is not only vital, but also salutogenetic in cancer patients.

---

---

## CONCLUSION

The importance of music therapy in cancer patients is enormous. The numerous benefits of music therapy have outweighed the negative effects not only for the undergoing treatment patients, but also for the survivors who were successfully cured. Therefore, music not only helps out cancer patients by relieving the side effects, of but also decreases anxiety and the cancer related pain. Further, it helps to improve mood and emotions of patients thereby enhancing relaxation and relieving symptoms induced by the painful therapies. Psychologically, the right choice of music reduces the level of stress and also manages the sense of wellbeing in an individual. It has been shown that music helps to lower the heart rate, blood pressure, and breathing rate, and also the decreases the depression and insomnia. Additional evidence has also shown that waves of music can affect brain activity and reduce stress hormones. Finally, it can be said that creative therapy which includes music therapy can be regarded as one of the most beneficial non-pharmacological methods, non-invasive and highly complemented with drug therapy and interventions to promote mental health in cancer patients.

## REFERENCES

- American Music Therapy Association. Retrieved from <http://www.musictherapy.org>.
- Bernatzky, G., Presch, M., Anderson, M., & Panksepp, J. (2011). Emotional foundations of music as a nonpharmacological pain management tool in modern medicine. *Neuroscience and Biobehavioral Reviews*, 35, 1989-1999.
- Binns-Turner, P.G., Wilson, L.L., Pryor, E.R., Boyd, G.L., & Prickett, C.A. (2011). Perioperative music and its effects on anxiety, hemodynamics, and pain in women undergoing mastectomy. *The journal of American of nurse Anesthetist*, 79, S21-7.
- Bradt, J., Dileo, C., Grocke, D., & Magill, L. (2011). Music interventions for improving psychological and physical outcomes in cancer patients. *Cochrane Database Systematic Reviews*, 10(8).
- Bozuk, H., Artac, M., & Kara, A. (2006). Does music exposure during chemotherapy improve quality of life in early breast cancer? *Medical Science Monitor*, 12(5), 200-205.
- Boyde, C., Linden, U., Boehm, K., & Ostermann, T. (2012). The use of music therapy during the treatment of cancer patients: A collection of evidence. *Global Advances in Health and Medicine*, 1(5), 24-29.
-

- Burns, D.S., (2001). The effect of the Bonny method of guided imagery and music on the mood and quality of life of cancer patients. *Journal of Music Therapy*, 3(1), 51-65.
- Burns, D.S., Perkins, S.M., Tong, Y., Hilliard, R.E., & Cripe, L.D. (2015). Music therapy is associated with family perception of more spiritual support and decreased breathing problems in cancer patients receiving hospice care. *Journal of Pain and Symptom Management*, 50, 225-31.
- O'Callaghan, C., Sexton, M., & Wheeler, G. (2007). Music therapy as a non-pharmacological anxiolytic for pediatric patients. *Australian Radiology*, 51, 159-162.
- Cooper, L., & Foster, I. (2008). The use of music to aid patients' relaxation in a radiotherapy waiting room. *Radiography*, 14, 184-188.
- Dileo, C. (2006). Effects of music and music therapy on medical patients: a meta-analysis of the research and implications for the future. *Journal of the Society for Integrative Oncology*, 4, 67-70.
- Gallagher, L.M., Lagman, R., Walsh, D., Davis, M.P., & Legrand, S.B. (2006). The clinical effects of music therapy in palliative medicine. *Journal of the Multinational Association of Supportive Care in Cancer*, 14, 859-66.
- International Agency for Research on Cancer, (2008). Cancer Mondial, France. Retrieved from <http://www.iarc.fr> Accessed September 25, 2016.
- Kenyon, T. (2007). Effects of music therapy on surgical and cancer patients. *Breast Care*, 2, 217-220.
- Krishnaswamy, P., & Nair, S. (2016). Effect of Music Therapy on Pain and Anxiety Levels of Cancer Patients: A Pilot Study. *Indian Journal of Palliative Care*, 22(3), 307-311.
- Krout, R. (2007). Music listening to facilitate relaxation and promote wellness: integrated aspects of our neurophysiological responses to music. *Arts in Psychotherapy*, 34,134-141.
- Magill-Levreault, L. (2001). The use of music therapy to address the suffering in advanced cancer pain. *Journal of Palliative Care*, 17(3), 167-172.
- Magill, L. (2006). Role of music therapy in integrative oncology. *Journal of Society Integrative Oncology*, 49(20), 79-81.
-

- McClellan, S., Bunt, L., & Daykin, N. (2012). The healing and spiritual properties of music therapy at a cancer care centre. *Journal of Alternative and Complementary Medicine*, *18*, 402-7.
- Mehnert, A., & Koch, U. (2008). Psychological co-morbidity and health-related quality of life and its association with awareness, utilization and need for psychosocial support in a cancer register based sample of long-term breast cancer survivors. *Journal of Psychosomatic Research*, *64*, 383-391.
- Nilsson, U. (2009). Soothing music can increase oxytocin levels during bed rest after open-heart surgery: a randomised control trial. *Journal of Clinical Nursing*, *18*, 2153-2161.
- Li, X.M., Yan, H., Zhou, K.N., Dang, S.N., Wang, D.L., & Zhang, Y.P (2011). Effects of music therapy on pain among female breast cancer patients after radical mastectomy: results from a randomized controlled trial. *Breast Cancer Research & Treatment*, *128*, 411-419.
- Osoba, D., Hsu, M.A., Copley-Merriman, C. (2006). Stated preferences of patients with cancer for healthrelated quality-of-life (HRQOL) domains during treatment. *An International Journal of Quality life aspects of treatment, care and rehabilitation*, *15*(2), 273-283.
- Pothoulaki, M., McDonald, R., & Flowers, P. (2006). Methodological issues in music interventions in oncology settings. *A systematic literature review Arts in Psychotherapy*, *33*, 446-455.
- Rykwon, M. (2008). Experiencing music therapy cancer support. *Journal of Health Psychology*, *13*(2), 190-200.
- Stefan, K. A. (2009). Neuroscientific Perspective on Music Therapy. *The Neurosciences and Music III—Disorders and Plasticity: Annals of New York Academy of Sciences*, *1169*: 374-384.
- Tuinmann, G., Preissler, P., Böhmer, H., Suling, A., & Bokemeyer, C. (2016). The effects of music therapy in patients with high-dose chemotherapy and stem cell support: A randomized pilot study: Music therapy and stem cell transplantation. *Journal of the Psychological, Social and Behavioural dimensions of Cancer-Psycho-Oncology*.
- West, M. (2000). Music Therapy in Antiquity. In Horden P. (Ed.): *Music as medicine: The history of music therapy since antiquity*. Aldershot, England: Ashgate 51-68.
-

World Health Organization, (2015). Cancer Fact sheet No 297. Retrieved from <http://www.who.int> Accessed September 25, 2016.

Zhou, K., Li, X., Yan, H., Dang, S., & Wang, D. (2011). Effects of music therapy on depression and duration of hospital stay of breast cancer patients after radical mastectomy. *Chinese Medical Journal*, *124*(15), 2321–2327.

---