

## The implementation of music therapy as nursing palliative care during the treatment of patients affected by cancer

*La implementación de la musicoterapia como cuidados paliativos de enfermería durante el tratamiento de pacientes afectados por cáncer*

*A implementação da Musicoterapia como cuidado paliativo de enfermagem durante o tratamento de pacientes acometidos pelo câncer*

**Juliana Monteiro Marins<sup>1</sup>**

ORCID: 0000-0002-7923-3469

**Mariana Guimarães Gomes<sup>1</sup>**

ORCID: 0000-0003-4574-2625

**Michelle Natalie Carvalho<sup>1</sup>**

ORCID: 0000-0002-7189-6436

**Allan Carlos Mazzoni Lemos<sup>1</sup>**

ORCID: 0000-0002-7818-9478

**Karla Temistocles de Brito**

**Dantas Lemos<sup>2</sup>**

ORCID: 0000-0002-4343-9174

**Nebia Maria Almeida de**

**Figueiredo<sup>3</sup>**

ORCID: 0000-0003-0880-687X

<sup>1</sup>Instituto Brasileiro de Medicina e Reabilitação. Rio de Janeiro, Brazil.

<sup>2</sup>Marinha do Brasil. Rio de Janeiro, Brazil.

<sup>3</sup>Universidade Federal do Estado do Rio de Janeiro. Rio de Janeiro, Brazil.

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### Corresponding author:

Mariana Guimarães Gomes

E-mail:

[marianagomes1816@gmail.com](mailto:marianagomes1816@gmail.com)

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### Abstract

The aim was to investigate the benefits derived from the implementation of music therapy palliative care in patients diagnosed with neoplasms. This is exploratory bibliographic research where the databases used were: LILACS, MedLine, magazines and books using keywords such as: "cancer", "music therapy", "music", "palliative care", "psychology", "musicotherapy", "mental health", through treatments suggests the possibility of applying musical interventions, during clinical treatment, to reduce psycho-emotional issues such as anxiety disorders, depression, and panic attacks. The results obtained in the research indicate that Music Therapy helps in the process of recovery and cure of the disease and in the emotional therapy of patients who used the described care. It is concluded that Music Therapy is one of the best palliative care to be implemented for patients affected by cancer.

**Descriptors:** Music Therapy; Neoplasms; Nursing; Palliative Care; Health.

### Resumén

El objetivo fue investigar los beneficios derivados de la implementación de cuidados paliativos con musicoterapia en pacientes diagnosticados de neoplasias. Se trata de una investigación bibliográfica exploratoria donde las bases de datos utilizadas fueron: LILACS, MedLine, revistas y libros mediante el uso de palabras clave como: "cáncer", "musicoterapia", "música", "cuidados paliativos", "psicología", "musicoterapia", "salud mental", a través de tratamientos sugiere la posibilidad de aplicar intervenciones musicales, durante el tratamiento clínico, para reducir problemas psicoemocionales como trastornos de ansiedad, depresión y ataques de pánico. Los resultados obtenidos en la investigación indican que la Musicoterapia ayuda en el proceso de recuperación y curación de la enfermedad y en la terapia emocional de los pacientes que utilizaron los cuidados descritos. Se concluye que la Musicoterapia es uno de los mejores cuidados paliativos a implementar para pacientes afectados por cáncer.

**Descriptorios:** Musicoterapia; Neoplasias; Enfermería; Cuidados Paliativos; Salud.

### Resumo

Objetivou-se investigar os benefícios derivados da implementação do cuidado paliativo Musicoterápico em pacientes com Diagnóstico de Neoplasias. Trata-se de uma pesquisa bibliográfica de caráter exploratório onde as bases de dados utilizadas foram: LILACS, MedLine, revistas e livros através do uso de palavras chaves como: "câncer", "musicoterapia", "música", "cuidados paliativos", "psicologia", "musicoterapy", "mental health", mediante aos tratamentos sugere a possibilidade de aplicar meios de intervenções musicais, no decorrer do tratamento clínico, para reduzir as questões psicoemocionais como transtornos de ansiedade, depressão e ataques de pânico. Os resultados obtidos na pesquisa designam-se que a Musicoterapia auxilia no processo de recuperação e cura da doença e na terapia emocional dos pacientes que fizeram uso do cuidado descrito. Conclui-se que a Musicoterapia é um dos melhores cuidados paliativos a serem implementados para os pacientes acometidos pelo Câncer.

**Descritores:** Musicoterapia; Neoplasias; Enfermagem; Cuidados Paliativos; Saúde.

## Introduction

Neuroscience makes it possible to clarify the importance of Music in everyday life, in people's lives, through auditory perception and auditory stimuli, it is possible to understand that music is a highly effective tool in neurological studies that has been showing countless results of local interactions in the brain<sup>1</sup>. Sound perception involves several brain structures, such as prefrontal cortex, premotor cortex, motor cortex, somatosensory cortex, temporal lobes, parietal cortex, occipital cortex, cerebellum, and areas of the limbic system, including the amygdala and the thalamus<sup>2</sup>. Both the primary perception of sound and its syntactic understandings are modulated by the emotional experience of listening to music. The integration of cortical areas of the brain with the limbic system (responsible for emotions) causes music processing to be influenced by emotion<sup>3</sup>.

There is a current change in the pattern of cognitive and perceptual development in view of musical exposure, obtaining the possibility of new skills such as in the poles of reasoning, memory, understanding, perception, motivation, emotional intelligence, attention, creativity, and metacognition. Through the type of sound, it is possible to establish the connection between perception and memory that makes music have a greater meaning, because neurons seek to retain information by having a sound coded pattern for each space in the brain<sup>4</sup>.

Auditory perceptions of musical sound waves enable sensations of emotions such as pleasure and happiness. This occurrence is because dopamine (an important neurotransmitter responsible for the sensation of pleasure) is released induced by Music Therapy through the nursing team. Through sound melodies, it is possible to provoke much more beneficial effects than those mentioned above, a feeling of physical well-being and improvement in the emotional and mental condition of patients affected by Cancer<sup>5</sup>.

The sets of sensations developed by Music Therapy in the human mind trigger and transform the state the patient is in at that moment, as the human mind is responsible for coordinating the body as a whole and propagating the sensations caused. The study of the neuroscience of music, over the years, has contributed to an understanding of the effects that music has on individuals and its extremely important impact on the functioning of the human brain<sup>4</sup>.

Thus, the coupling of the performance of the Limbic System and the right Temporal Cortex induces positive and visible psychological and physical effects to be analyzed by the responsible professional. Regarding patients diagnosed with Cancer, the applicability of Music Therapy proves to be an excellent care technique that the Nursing team can implement<sup>6</sup>. Music therapy is a science studied for many years, which serves as a form of communication and rehabilitation with a person's subconscious. Generally used for bedridden patients, coma states and patients with mental problems in more severe conditions such as terminal illness<sup>7</sup>.

According to the World Federation of Music Therapy, Music Therapy aims to develop potential and/or

restore the individual's functions so that he/she can achieve a better intra and/or interpersonal integration and, consequently, a better quality of life, through prevention, rehabilitation or treatment<sup>8</sup>.

Music therapy is not always a method used by health professionals in their care, many do not know the great importance of music in people's lives and how it can help in their patient's conditioning. The effects of stimulation through music, the focus of this study, have received systematic attention in the scientific literature; however, there is still research and discussion on the effects of music specifically in the organizational context<sup>9,10</sup>. Listening to music is a form of mental relaxation where we can work with anxiety, mood and even pain. This focus on therapy for patients with these diseases and problems, as it is currently a very large target in the population, is of due importance. The melodies of songs that we like to listen to can bring us a very great well-being, as it releases dopamine and endorphins to our neurotransmitters, causing the sensation of pleasure when listening to something that improves our mood<sup>11</sup>.

The Theory of Interpersonal Relationship in Nursing, written by Nurse and PhD in Psychiatry Hildegard Elizabeth Peplau, made up that there are basically three axes in the health-disease process: the patient, the nurse and the interpersonal relationship established between them. The principle of the theory seeks to instruct that the therapy implemented by the Nurse will only obtain good results in the disease care process (in this case, Cancer) if there is respect, trust, and mutual knowledge between the parties involved<sup>12</sup>.

According to the theory, Nursing is curative and caring, therefore, the Nurse must establish a Nursing Process that is coherent and adequate with the client's health problem, aiming at obtaining satisfactory results in the patient's framework. Peplau reports the importance of basing himself on the needs that the client has and that should be addressed through an efficient care plan. The applicability of Music Therapy in patients diagnosed with Cancer follows the principle of the theory of interpersonal relationships, as the nurse adopts a therapeutic technique as a method of care based on co-participation and reduction of suffering and helplessness caused by the disease<sup>12</sup>.

Considering the above, the following guiding question was chosen: What benefits does Music Therapy offer to cancer patients? Our object of study is Music Therapy in oncological palliative care. The objectives of the study are: To analyze the effects of Music Therapy in Oncology patients and describe the effects arising from the use of palliative care.

Justification of the study is due to the scarcity of academic works on Music Therapy and Cancer and the existence of works that have little depth in this theme, consequently, encouraging research on the subject. The relevance of the study was given through the search for theoretical studies that would contribute to the deepening and effectiveness of seeking a new, less invasive care for cancer patients to propose a more welcoming and



stimulating care that would alleviate physical and mental suffering of the patient.

It becomes relevant the effect of music that has three basic principles: melody, rhythm, and harmony. Music is considered a gauge of human mood, giving the ability of music to regulate moods through its melodies. In the brain, through sensory stimuli, it plays an important role in communication between emotions, promoting neuroplasticity and preventing neurocognitive degradation<sup>13</sup>.

### Methodology

This is bibliographic research carried out from the analysis and survey of materials already published digitally or physically, of an exploratory nature, seeking to become familiar with the problem in question and deepening the studies<sup>14</sup>. The databases were LILACS, Medline, journals, and books using keywords such as: 'cancer', 'music therapy', 'music', 'palliative care, psychology, 'musicotherapy', 'mental health', through treatments with cancer patients, it is possible to apply means of musical interventions, during clinical treatment, to reduce psycho-emotional issues such as anxiety disorders, depression, and panic attacks. The inclusion criteria were works that were within the theme and the exclusion criteria: works that were outside the theme.

The study base was programmed to obtain concrete and plausible feedback on the possible applicability of music therapy to cancer patients regarding the coping strategies used in the face of the disease and treatment. Verifying that the interviewed patients create ways to face them, to alleviate the suffering and deal with the situation<sup>15</sup>.

### Results and Discussion

Music therapy is a work that not only affects our brain unconscious, but it also works with emotions and feelings. All these songs make up a person's musical memory and can arouse emotions<sup>11,16</sup>.

Cancer is possibly the most feared disease today. Its diagnosis, for many people, means a direct approach to the prospect of death, mutilation, pain and incurability<sup>17,18</sup>.

As explained by Cléo Correia, music therapist at the Music Therapy Outpatient Clinic of Neurology of Behavior at the Federal University of São Paulo (Unifesp), music therapy can bring old and even recent memories, not only for cancer patients, but also for Alzheimer's; thus, helping in the cure of this disease and emotional therapy of a cancer patient.

One factor that may prove the use of music therapy is the documentary *Alive inside: a story of music and memory*. In this documentary, there are several stories where the use of music therapy is efficient and good for patients.

It brings stories like Henry, a patient weakened by old age and neurological problems that affect his memory

and cognition. Withdrawn, he doesn't remember his own daughter and finds it difficult to communicate, until he rescues an old passion: music. After listening to a song through headphones, Henry transforms into a talking man, able to quote even his favorite singer.

Apart from the idea of documentaries, another case is that of Angélica Mattos. Diagnosed with breast cancer at the age of 35, teacher Angélica Mattos de Oliveira began participating in music therapy sessions by chance, when she needed to change the day of chemotherapy for an issue involving the health insurance. In the next session, she found the project team playing and singing for the patients. "I was sad, dismayed. Even trying to keep the spirits high, one hour we feel bad. But the last chemo sessions were accompanied by music. I sang, danced, laughed, cried. It's very good. It reduces pain and anxiety", says Angélica<sup>19</sup>.

Due to the facts mentioned, it was necessary to explore the advantages of applying the palliative technique in daily practices in the health area through the following articles: "Music from a neuroscientific perspective"; "The use of Music Therapy in mental health"; "The benefit of classical music for the brain"; "The use of music in palliative care: humanizing care and facilitating goodbye" and the book "Nursing Theories". Exploratory research was carried out, which made it possible to highlight reports on the discoveries of Neuroscience and the therapeutic effects of music therapy, developing a beneficial and promising result for patients suffering from mental disorders. It is possible to observe and understand considering the observations of Zatorre, an article published in *Scio Education* in September 2019, which says: "Engagement with music is known to bring cognitive, emotional and physiological benefits as well as social and individual well-being"<sup>20</sup>. Through this contextual methodology, it made it possible to support the construction of concepts and hypotheses related to palliative care with cancer patients through music therapy and how this process of care begins through nursing care.

### Conclusion

Music therapy was shown to be a promising care intervention to be implemented in Nursing, as the present study presented the benefits arising from Classical Music, it is plausible to optimize the recovery of patients and the significant relief of their symptoms in all phases of the disease.

It is also possible to infer that new palliative care needs to be implemented by the Nurse, prioritizing the improvement of the frail patient's physical and mental condition. Music therapy is an alternative to be inserted in the day-to-day, both for the patient affected by the disease, and for the Nurse who is side by side with the patient daily.

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