

Analysis of the Music Therapy Application During the COVID-19 Period

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Abstract: During the past three years, from December 2019 to 2022, the global society has suffered from endless cycles of pandemic outbreaks and quarantines due to COVID-19. During this period, there was a massive turbulence in the public's mental health; people's, especially adolescents' mental health decreased a lot due to the high stress and level of anxiety during the lockdown. This paper mainly focuses on how music therapy is currently used during the lockdown period of COVID-19, what advantages music therapy's characteristics have during this kind of time period, and how in a similar situation in the future, music therapy can be improved to use in its full potential, especially for the group of teenagers during a global pandemic. This paper focuses on three studies that utilize music therapy in different areas of treating mental illness in the COVID-19 lockdown period. All three of the studies prove significant effects and positive responses from the patients. However, several disadvantages still need to be solved if music therapy is going to be a mainstream treatment during pandemics like the COVID-19 period. The examination of how music therapy can be used as a more effective during time periods like a global pandemic provides more choices when facing another global pandemic in the future.

Keywords: COVID-19, adolescents' mental health, music therapy, nurses' mental health, traditional Chinese medicine

1. Introduction

On the 11th of March, 2020, the World Health Organization (WHO), officially announced that the COVID-19, with more than 118,000 cases in 114 countries and 4291 deaths, is officially a global pandemic. During the past three years, from December 2019 to 2022, the global society has suffered from endless cycles of pandemic outbreaks and quarantines due to the COVID-19 [1]. During this period, there was a massive turbulence in the public's mental health, especially nurses' and adolescents' mental health decreased a lot due to the high stress and level of anxiety during the lockdown. This paper focuses on that music therapy, combined with other techniques in psychological therapy, can serve as a useful technique during global pandemics like the COVID-19 outbreak. This paper explores two of the most stressed groups under the situation of a global pandemic and proves how music therapy can serve as a technique to serve those who have mild symptoms in an effective and efficient way. The essay also explores how different kinds of music therapy, including SSMT and the five-element music, can use their unique characteristics to serve people during a global pandemic. In the future, if a virus like the COVID-19 creates a global outbreak, music therapy can be

used more efficiently by professionals, and with a more advanced structure, the medical system for mental health can be better prepared when the world, in the worst scenario, is under another global pandemic.

2. Mental Health Status During the COVID-19 Period

2.1. Main Groups Suffered from Mental Health During the COVID-19 Period

During the COVID-19 period, the overall number and level of mental health problems are increasing rapidly compared to before around the world. A study aiming to investigate alternation in using mental health services resources in the UK, and how these changes' influences on the general mental health during the COVID-19 pandemic, shows the increased risk of mental illness will lead to the need for innovative or more mental health support for about twenty percent of the population in the UK [2]. Not only in the UK, but also in other countries around the world. In 2022, the WHO announced a massive increase of 25% in the global prevalence of anxiety and depression [3]. One of the groups that has the most significant increase in mental health problems is adolescents. During lockdown, students were forced to stay at home, their increased anxiety and stress come from both the communication within their families and social media. Sanaz et al. mentioned in their paper that there's an obvious correlation between the influence caused on communication within families by quarantine and children's likability to be depressed or feel anxious ($P < 0.001$), and adolescents' (mostly students) main sources to get updates and information on the topic of COVID-19 is on the radio or social media [4]. Sanaz and her colleagues pointed out that the reason students to have especially high stress and depression levels might be because of the hormonal changes during adolescence; their reference also pointed out that in a study in Central and North America, almost one third of the parents found that their children who experienced isolation due to quarantine during the COVID-19 are suffering from post-traumatic stress disorder (PTSD) [4]. A study with all student participants in China shows that most of their participants suffer from different levels of depression and anxiety, which means during a global pandemic like the COVID-19, adolescents are more likely to be influenced mentally and be depressed [4].

Another main group that suffers from high levels of stress is the nurses and other medical staff. As Sarah Wilding and her colleagues' paper shows, the increasing of patients with mental health problems has a direct correlation with COVID-19, "individuals who had contracted probable COVID-19 had poorer outcomes on the measures" [2]. The rapid increase of patients waiting for psychological treatment added more stress and anxiety to the nurses and medical staff; the data shows that there's at least one in every five who report symptoms like feeling anxious, depressed and stressed [5]. This data was collected from a study in Australia in research of the anxiety and stress level of the Australian nurses conducted by Carol Chunfeng Wang, which shows the need for a new system in the medical institutions and better mental health care for the medical staffs [5].

2.2. Problems in the Mental Health Care System

During the lockdown caused by COVID-19, the demand for mental health services has become a big problem. The by-products caused by quarantine include anxiety, panic, fear, depression, acute stress, etc., which are usually considered not as severe as mental disorders like bipolar disorder or schizophrenia, but still need careful treatment before they cause disruption in the patients' daily lives or developed into a more intense disease. However, during the pandemic, as Dominikus mentioned in the case study, people who have mild symptoms like anxiety, fear, and stress are being rejected because of a lack of human labor, or the patients can't find a psychiatrist who specializes in the area they need [6]. The main problem is the lack of resources, Dominikus pointed out in the essay, so those whose symptoms are not severe are being treated with less attention compared to those who have

severe suicidal tendencies. One of the results of this system is that those whose symptoms are serious developed from those who were treated with less attention [6].

3. Analysis of the Music Therapy in Mental Health

3.1. Advantages of Music Therapy

One of the most significant changes in the requirement to treat a patient is the social distance. Psychiatrists can't stay with their clients in a close environment, which lead to a large increase in the use of telehealth services. Another change during the COVID-19 period is the large number of patients waiting for treatment, so for those patients who have symptoms associated with anxiety and depression partly caused by stress from COVID-19 pandemic, it is best that the process of treatment can be short and end within a few sessions instead of over a long period of few months. One of the case studies that involves tele-psychotherapy and music therapy shows the advantages of combining music therapy in treating patients with not severe symptoms. Dominikus documents in his paper using a case study of a 33-years old widow tested positive for COVID-19 but has no symptoms who has a high level of anxiety, panic attack, fear, depression, acute stress, insomnia, and delusions of death [6]. The case combined Single Session Therapy with music (SSMT), with the Solution Focused Brief Therapy (SFBT). According to Situmorang, Single-Session Therapy (SST) was first undertaken by Sigmund Freud, then Aurelia öhm-Kronich tested the therapy in 1892, following by Gustav mähler in 1910. Therefore, multiple references to SST can be found [6]. Furthermore, a study conducted by Ruth Perkins using "a solution-focused single session therapy" [7] in an urban child and adolescent mental health clinic for more than one year. Their result shows that "the treatment group showed statistically and clinically significant improvement, relative to the control group, on all measures where the initial client group mean was high to be of clinical concern", also, "show similarities with various other SST studies without controls and with studies using other forms of psychotherapy" [7].

3.2. Procedures of the Single-session Therapy Combining with Music Therapy

According to Dominikus's study, the procedure of the single-session therapy combining with music therapy starts with the scaling questions, which help patients "gauge the psychological issues he/she is actually experiencing", so they can answer the miracle questions (the last question during the session, asking the client to imagine a miracle that will happen soon, which allows the client to answer immediately that he/she will be happy after the miracle. Then, the next question will guide the client to "rely on ideas that come through him/herself" [6] more critically in the calm state. The scaling question in Situmoorang's study will be a question that asks the patient to scale how they feel from 0-10, 0 for no pain at all, and 10 for very severe pain.

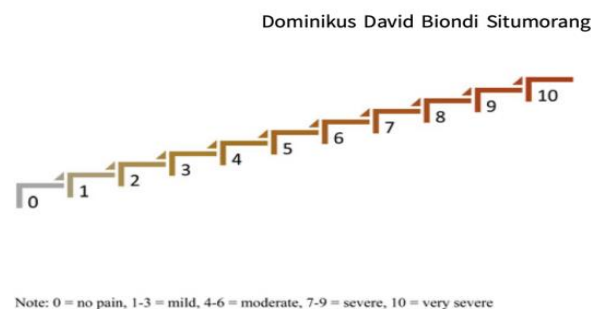


Figure 1: Psychological problems scales of scaling questions [6].

After the scaling question, the psychiatrist will invite the patient to sing a song they love, which can improve the positive feeling of the patient by bringing up their past memories. Then the patients will be invited to create new lyrics for the song they sang earlier and make a “soundtrack of my life” [6]. The loved song with new lyrics will guide the patients positively and remind them the solution he/she has made so that they could make it happen [6]. This program using tele-psychotherapy and SSMT has been proved useful by the patient Situmoorang used as an example that the patient admitted after the session has concluded, her levels of anxiety, panic, fear, depression, acute stress, insomnia, and thoughts of death had decreased to a level of 5 [6]. Also, it is a suitable way to work online during time periods like the COVID pandemic. In the end, this has led to the implementation of the tele-psychotherapy method, accessible through various means such as chat, email, video calls, or even mobile platforms, for mental health clinicians worldwide. Currently, due to the COVID-19 pandemic, tele-psychotherapy remains the sole viable option [6], which also “not required to meet in a physical location, reducing the need for driving, appointment-related issues, and operating costs” [6] and can help patients effectively in a short time. In addition, characteristics of tele-psychotherapy can also increase the anonymity of the patients and better protect their privacy as Situmoorang says that approaches that enhance increased anonymity, security, and confidentiality, thereby mitigating any potential stigma linked with seeking help from counselors, psychologists, psychiatrists, or therapists [6].

3.3. Other Ways of Using Music Therapy During COVID-19

3.3.1. Music Therapy in the End-of-Life Care

End-of-life care is another important aspect that needs to be valued during COVID-19. music therapy has been one of the ways to provide end-of-life care in the hospital, as Masko and his colleagues mention in their essay that more and more, hospices are incorporating music therapists into their teams. These professionals are frequently tasked with offering supplementary spiritual support to patients in their final stages of life [8]. Although performing end-of-life cares online requires practice, Soon’s paper talks about the potential of using music therapy for end-of-life care during the pandemic. In the essay, two cases were used to demonstrate similar strengths for music therapy. The first case is about a 69-year-old Chinese gentleman named Peter “with lung cancer and progressive compressive optic neuropathy, resulting in complete blindness” [9]. After being transferred to online sessions, the music therapist treats Peter by helping Peter to record songs for his son and mother, which allows Peter to express his love to his family and become an advocate by showing the public that “patients can still contribute despite suffering from a terminal illness” [9]. In later sessions, Peter also “channeled his energy towards lyric substitution and derived much joy from being involved in the creative process” [9]; the process of rewriting the lyrics gives Peter an outlet to vent his emotions, so his attention won’t be focused on losing vision. In the end, Soon describes, “he started to share his songs with various staff, saying that it made him happy to share his music. Peter passed away peacefully two weeks after his last music therapy session” [9]. The second case report about Ivan, who suffered from terminal liver cancer, shows similar progress in being able to express the patients’ feelings and appreciate their lives and families.

3.3.2. Light Acupuncture Combined with Five-element Music Therapy

Other studies have also developed other ways of using music therapy during the COVID-19 pandemic. For example, Wang’s research about light acupuncture and five-element music therapy for well-being during and post-COVID-19 [5]. Wang and his colleagues’ research based on the fact of the increasing anxiety and depression among nurses and other medical staff in the hospital during the pandemic, use Traditional Chinese Medicine, including acupuncture and the five-element music therapy in Huangdi

Neijing. The team documents the treatment for the Australian nurses who are involved in high pressure of working during the COVID pandemic, and they aim to prove the practicality and healing benefits of employing a blend of light acupuncture and five-element music therapy to enhance the mental health and overall well-being of nurses both during and after the COVID-29 pandemic [5]. The five-element music therapy is based on Huangdi Neijing (The Yellow Emperor's Classic of Medicine) which is one of the most important texts in the history of Chinese traditional medicine development. In an article published in the South China Morning Post, it explains that the "Huangdi Neijing" stands as one of the earliest and most pivotal texts in the annals of Chinese medicine. Its impact on medical philosophy has been profound throughout the ages. Within its pages are conversations between the Yellow Emperor and his wise healers, delving into a wide array of medical subjects encompassing diagnostics, pathology, and acupuncture theory and application [10]. In Wang's study, they explore the relationship between the five elements: Gong (Do), Shang (Re), Jiao (Mi), Zhi (So), and Yu (La) and five main human organs. They successfully found that the combination of the notes can create positive effects on the therapy, reduced chronic fatigue and lowered the pain symptoms and increase sleep time and quality in patients who are suffering from cancer [5].

4. Conclusion

This paper focuses on how music therapy can be a potential main way of treatment in a global pandemic. In the case of the COVID-19 pandemic, recent studies prove that the number of people with mental problems like anxiety, depression, and suicidal thoughts has increased, and the medical system is under high pressure to treat those patients with their usual long process of treatment. During this time period, those who have been noticed to have particularly low mental health are adolescents and nurses. The main problems exposed under the COVID-19 pandemic in the current medical systems are the lack of resources and medical staff for treating the overwhelming numbers of patients. This paper discusses three different studies combining music therapy with partial or full telepsychotherapy. These studies examine the combination of single-session therapy and music therapy works online with a case study of a widow with COVID symptoms, the feasibility of using music therapy online for end-of-life care, and the use of music therapy combined with Traditional Chinese Medicine. All three of the studies prove the positive effect of using music therapy during a global pandemic and show that with the combination of telepsychotherapy, the main difficulties for the mental health service system can be solved.

However, there are still limitations that need to be overcome: Technological problems like disconnection and unstable WiFi, and when working online, the music therapists lack physical responses from the patients and they don't have enough non-verbal evidence from the patients. Future studies can focus on solving these disadvantages. Nowadays, there are not a lot of studies focused on how effective music therapy combined with other techniques can be, one of the limitations in this paper is that there are not a large number of studies that can fully illustrate the effect of music therapy during COVID-19, therefore, other potential disadvantages are still under discovering.

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