

Music therapy and Postnatal Depression: a Literature Review

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AUTHOR BIO

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ABSTRACT

Postnatal depression is a type of depression occurring after a woman has given birth. Music therapy, which means using music to improve health, is considered an alternative treatment for postnatal depression. This literature review aims to investigate whether and to what extent music therapy has an effect on reducing postnatal depression symptoms. While some results show that music therapy is potentially beneficial, the research done on this topic is very limited and future studies should be done to further explore the impact of music therapy on postnatal depression.

INTRODUCTION

Music has been showing its relationship with improved physical and mental health for many decades (Sanfilippo et al., 2021). In everyday life, people use music to adjust their emotions (Lin et al., 2019); in medical and other situations, music is further divided into several categories, including music therapy, community music, music medicine, and music education (MacDonald, 2013).

Music therapy, a type of therapy where a therapist uses music to help patients achieve certain health goals (American Music Therapy Association, 2005), has been shown to be helpful for treating many ailments. For instance, as mentioned in a mini-review by Kurdi & Gasti (2017), patients with Parkinson's disease show restored motor capacities after receiving music therapy. Also, music therapy has been found to be effective in helping autistic children to establish and improve their social and communicative skills (Kurdi & Gasti, 2017). Improved health conditions are seen in the elderly as well, after a month of music therapy exposure (Kurdi & Gasti, 2017).

Depression, or major depressive disorder, is one of the most prevalent mental disorders. Depression negatively influences how a person perceives the world and how they act (Torres, 2020). Postnatal depression is “a depressive state experienced by the mother within the first year following the delivery of a baby” (Terry, 2012). Mothers with postnatal depression are likely to experience a lower quality of sleep, a higher anxiety level, and a higher stress level (Stewart & Vigod, 2016). The mother-infant bonding may also be influenced, which will even affect the infant's future development (Netsi et al., 2018).

Treatments for postnatal depression are broadly divided into four categories: pharmacological, psychological, psychosocial, and complementary and alternative medicines (Terry, 2012). While pharmacological and psychotherapy and psychosocial therapies are already being relatively widely used, complementary and alternative medicines, including music therapy, are being researched and put into use more often, as they are less expensive, easier to access and have minor side effects (Lin et al., 2019; Terry, 2012). The objective of this literature review is to explore whether using music therapy can be successful in treating postnatal depression, and if so, to what extent can it be effective for reducing postnatal depression symptoms.

METHODOLOGY

When conducting this literature review, searching engines and databases such as Google Scholar, PubMed, and Refseek were used. Keywords used when searching for sources include music therapy, postnatal depression, postpartum depression, music, depression, treatments for postnatal depression, music therapy and postnatal depression, music therapy and depression. As this literature review focuses only on the effect of music therapy on postnatal depression during the postpartum period, sources analyzing the effect of the use of music interventions before or during pregnancy were excluded. When discussing relevant literature which includes music interventions to postnatal depression, but does not necessarily outline the word “music therapy”, the term “music therapy” was still used.

DISCUSSION

Music Therapy

Music Therapy is defined as a licensed music therapist using music interventions to help patients achieve certain health goals within “a therapeutic relationship” (American Music Therapy Association, 2005). However, there are also articles arguing that music therapy does not necessarily need to be carried out with a licensed music therapist, or within a “theoretical framework”, as long as the aim of using music interventions is to improve patients’ mental or physical health (Terry, 2012).

MacDonald (2013) points out in a review that there is also overlap between music therapy and other forms of music, which are community music, music medicine, music education, and everyday use of music. In particular, the overlap between music therapy and community music is mostly significant. Instead of a licensed music therapist, community music activities are usually conducted by a community leader who has the experience of music instrument playing (Sanfilippo et al., 2021). The biggest difference between music therapy and community music, according to MacDonald (2013), is their different aims. For music therapy, as mentioned earlier, the primary goal is to bring positive effects to the clients’ health. In contrast, community music does not list “therapeutic effects” as their main objective; they focus more on giving more opportunities of engaging in music activities and practices to people in their local communities (MacDonald, 2013). However, in most cases, community music still brings positive therapeutic effects despite these not being their first concern (MacDonald, 2013). Under these circumstances, it is hard to define clearly whether the music intervention involved is music therapy or community music.

Furthermore, the presence of a licensed music therapist may not be mandatory, as argued in some articles: there might be cases when a

“non-professional” who is not holding a music therapist license strictly follows the rules of music therapy, and it would not be appropriate to not classify this act as “music therapy” (Leubner & Hinterberger, 2017). On top of this, there are significant differences in terms of “uniform standards or eligibility requirements” for music therapy and music therapists between different countries (Leubner & Hinterberger, 2017).

In general, there are two types of music therapy: active music therapy, and passive or receptive music therapy. In active music therapy, people “re-create, improvise or compose music”, which requires a music therapist to use professional skills to help them act out their feelings and thoughts through music (Terry, 2012). While in passive, or receptive music therapy, people only listen to the music, either it is self-selected music or prescribed music by a music therapist (Lin et al., 2019). To this extent, the definitions of music therapy and music medicine are again overlapping as they both aim to have a positive impact on the health of the patients; music medicine is defined as patients listening to music chosen by a healthcare professional in “medical contexts” (Lin et al., 2019; MacDonald, 2013). Music medicine per se is a relatively more concentrated area and there are not many researchers working in this field, and it only overlaps with music therapy but not with other forms of music (MacDonald, 2013). In terms of the use of music medicine, helping patients who are receiving medical operations to alleviate their pain, anxiety, and distress is one of the most representative examples (MacDonald, 2013). Music therapy and music medicine together are called “music interventions”, and their relation with improved physical and mental health has been shown by multiple studies (Lin et al., 2019).

In this literature review, in order to take every potential effect of music therapy into

account, the term “music therapy” is used when discussing relevant literature which (i), does not point out explicitly which type of music or music interventions were involved, due to the overlap between different types of music and the ambiguity of their definitions, or (ii), indicates an absence of a licensed music therapist.

Music Therapy and Depression

Depression, as mentioned earlier, can bring negative impacts on a person’s everyday life. In recent decades, more research on using music as an intervention to help patients suffering from depression has been done (Leubner & Hinterberger, 2017). In a review article by Leubner & Hinterberger (2017), 28 studies are analyzed to investigate the use and effect of music interventions on depression, and 26 of them show a “significant reduction” in depressive symptoms in participants in the music group compared to those in either the control or the comparison group. This includes a study in which older adults with depression are assigned into two music therapy groups (one with participants learning music therapy techniques with regular home visits by a music therapist and the other with the same techniques with moderate music therapist intervention) and one control group (Hanser & Thompson, 1994). The results show significantly improved depressive symptoms in the two music conditions than the control group (Hanser & Thompson, 1994). Another study discussed by Leubner & Hinterberger (2017) compares the effect of music therapy on depression with psychotherapy, and there are fewer depressive symptoms in participants in the music therapy group compared to those in the psychotherapy group (Castillo-Pérez et al., 2010). Multiple studies discussing the effect of music therapy on depressive symptoms in patients with other forms of disorders or even people with no diagnosed disorder (such as psychiatric patients,

patients with cancer, the elderly, and prisoners.) are also analyzed by Leubner & Hinterberger (2017), and most of them prove the statement that music therapy has a positive impact on depressive symptoms. From these studies, it can be determined that music therapy can be used as a potential treatment for depression. Further, it can be inferred that music therapy may also be used as a treatment for postnatal depression, a type of mental disorder that falls under the big category of depression.

Postnatal Depression

Postnatal depression, or postpartum depression, is a type of depression diagnosed mostly within 6 months after giving birth, and any diagnosis in the first year after birth can be classified as postnatal depression (Bell & Andersson, 2016). Different from what is called “baby blues”, postnatal depression lasts for a longer time and is not only caused by sudden and significant hormonal changes during the perinatal period. Postnatal depression also differs from postnatal psychosis which is often linked to suicide and infanticide, as postnatal depression is less serious but more common (Bell & Andersson, 2016).

According to Terry (2012), there is no factor that is known to directly cause postnatal depression to occur, but there are some risk factors which can contribute to a higher risk of getting postnatal depression. Ghaedrahmati et al. (2017) divide the risk factors of postnatal depression into five main categories: psychological, biological, obstetric, social, and lifestyle.

Psychological risk factors can be further divided into two aspects; one is a past history of depression, and the other is the way in which the mother perceives her birth experience. Mothers who are previously diagnosed with depression,

either before pregnancy or prenatally, are shown to be more easily influenced by the hormonal changes after birth and thus more likely to develop postnatal depression, instead of developing only mild and temporary “baby blues” or maintaining a normal mental state. The mother’s attitude toward her birth experience can be affected by factors such as experience of sexual abuse, unwanted child gender, and confidence towards parenting.

Biological factors include the age at pregnancy, blood glucose level, and hormone levels which include serotonin and tryptophan, oxytocin, estrogen, and several others. Obstetric factors refer to the number of children a woman has given birth to, the mode of birth which indicates the risk of pregnancy, and a disparity between the mother’s expectations and real birth events.

Postnatal depression is also related to the social support a mother receives, in terms of “emotional support, financial support, intelligence support, and empathy relations”. A healthy lifestyle can possibly reduce the chance of the development of postnatal depression, which takes a diet with all nutrients required, a sufficient quality and quantity of sleep, and regular exercise into account. A more detailed discussion of the risk factors of postnatal depression can be found in the narrative review by Ghaedrahmati et al. (2017).

Postnatal depression not only has negative impacts on the mother, i.e. sleep difficulties, a higher anxiety level, and other common depressive symptoms (Stewart & Vigod, 2016), it is also linked to poor mother-infant bonding and adverse child outcomes, including difficulties in understanding and cognition, or higher chances of depression (Netsi et al., 2018). Thus, the importance of

finding effective and reliable treatments for postnatal depression goes without saying.

Treatments for Postnatal Depression

There are four types of treatments for postnatal depression: pharmacological, psychological, psychosocial therapies, and complementary or alternative medicines (Terry, 2012).

Taking antidepressants, which is an example of pharmacological treatment, is the most common treatment for postnatal depression. Antidepressants, i.e. medications which are used against depression, are often the first choice for mothers with moderate-severe symptoms of postnatal depression, although its effectiveness and safety have not yet been approved by enough research (Molyneaux et al., 2014; Molyneaux et al., 2018). Meanwhile, studies have shown that there are serious side effects brought by antidepressants, such as drowsiness and headaches, which can heavily influence a mother’s normal activity; antidepressants can even endanger the infant’s health as they may be excreted into breast milk (Terry, 2012).

Psychological treatment is a non-medical option that is chosen by many mothers with postnatal depression because it does not have any side effects neither to themselves nor to the infant (Terry, 2012). As suggested by Stephens et al. (2016), psychological therapies include “support groups, counseling, cognitive behavioral therapy, interpersonal therapy, and psychodynamic therapy”. Aside from being an effective treatment for postnatal depression, psychological methods can also be used to prevent postnatal depression before it occurs (Stephens et al., 2016).

Psychosocial therapy is another non-medication treatment for postnatal depression. As a “lack of social support” is considered one of the most important risk factors of postnatal depression, psychosocial therapy provides the exact social treatment for postnatal depression (Terry, 2012). These therapies involve talking with a psychosocial therapist, as well as engaging in group activities with other mothers with the same mental disease (Terry, 2012).

Complementary or alternative medicines are a relatively new form of treatment for postnatal depression, and there are more clinical psychologists who are willing to use both traditional treatments (pharmacological, psychological, or psychosocial) and complementary or alternative medicines such as music therapy, yoga, and massage (Terry, 2012). However, whether these types of treatment are effective for reducing postnatal depression symptoms and to what extent they are effective has not been assessed by enough research. As a result, this literature review aims to investigate if music therapy can be used as a tool to treat patients with postnatal depression.

Music Therapy and Postnatal Depression

Although music therapy has been used as a form of treatment for health problems and mental disorders, including cancer, coronary heart disease, autism, depression, anxiety, and many others (Lin et al., 2019; Terry, 2012), it appears surprising that there is very limited literature discussing the use of music therapy on mothers with postnatal depression. After a decade, what Terry (2012) concluded in a systematic review is still found to be true: there are “two distinct groups of research” broadly, one is “research which examined the effectiveness of common treatments for those individuals with PND, yet did not use music as

an intervention”, and the other is research that “assessed the use of music as a treatment for patients with depression, anxiety and stress”, but “were not geared specifically for women with PND”. However, there are several studies analyzing the effect of singing, which is a technique of active music therapy, on reducing postnatal depression symptoms.

In Fancourt & Perkins (2018)’s study, a randomized controlled trial was carried out on 134 mothers with moderate-severe symptoms of postnatal depression. The trial had 3 arms: group singing workshops, group play workshops, and usual care, with the purpose of making a comparison between group singing intervention and other types of interventions to postnatal depression. Each arm had five groups with 8 to 12 mothers for each group, and the program lasted for 10 weeks. In the singing group, which was also the experimental group, mothers listened to songs sung by the leaders, learned and sang songs with their babies, as well as making their own songs to express their feelings toward being a new mother. For the mothers in the creative play (comparison) group, they took part in activities such as doing arts and crafts with their babies and playing games with them. The singing group and creative play group were led by the same professional workshop leaders, in order to avoid any extraneous variables occurring because of the inconsistency. For mothers who were in the control group, usual care for postnatal depression was received. In the original report of the trial, Fancourt & Perkins (2018) classified the group singing intervention they used as “a novel psychosocial intervention”, as social support was provided by the interaction of the mothers with postnatal depression. However, as mothers in the singing group listened to, learned, sung, and created songs with the aim of improving their postnatal depression symptoms, this type of intervention should also be considered as an example of

using music therapy as a treatment, as mentioned earlier (although a credentialed therapist was not involved). The results of the randomized controlled trial showed a “significantly faster decrease” in the postnatal depression symptoms of mothers who were in the singing group, although all three arms experienced a decrease in the symptoms. One important result was, the speed of recovery of mothers in the creative play group did not differ significantly from mothers who received usual care. This implies that, even though social support was provided by both the singing group and play group, the singing group had its own unique characteristic that could contribute to the faster recovery speed of postnatal depression, which is probably linked to music itself. This adds to the evidence that music therapy can be used to treat postnatal depression. One noticeable result found in the post hoc tests done was, the recovery speed of the singing group was not statistically significantly faster than the creative play group, suggesting that social support was still a factor to be considered when treating patients with postnatal depression, possibly due to the fact that a lack of social support can be one of the origins of the development of postnatal depression.

A comparative qualitative study was later conducted with 54 mothers who had completed the 10-week group singing program, in order to explain the characteristics of the group singing intervention which helped to accelerate the improvement of postnatal depression (Perkins et al., 2018). Semi-structured interviews with the mothers reviewed several characteristics of the group singing intervention, which involved giving mothers a sense of “achievement and identity”, as well as the confidence and enhanced ability of being a mother, and other features such as giving mothers a chance to take a break from the role of a mother and to just be themselves.

Regarding limitations of this study, the sample consisted mainly of well-educated mothers (Fancourt & Perkins, 2018), which decreases the generalizability to all women with postnatal depression, as less-educated mothers were not included. Also, the relatively small sample size (134 mothers in the randomized controlled trial and 54 mothers in the qualitative study) is also a limitation and more studies need to be done using a larger sample size.

In another randomized controlled trial conducted by Wulff et al. (2021), the influence of maternal singing, which is also a type of active music therapy, on postnatal depression was investigated. However, the focus of this trial was not only on the postnatal depression symptoms, but also on maternal well-being and mother-infant bonding. Several questionnaires and scales including the Edinburgh Postnatal Depression Scale were sent out before the singing intervention, and after the intervention, which was 10 weeks later. Although there was no significant difference in the depressive symptoms reported by the mothers in the singing group and control group, the correlation analysis suggested fewer depressive symptoms when there is a higher frequency of mothers singing to themselves. However, although the depressive symptoms were assessed using the Edinburgh Postnatal Depression Scale, as the mothers recruited in this study were not all diagnosed with postnatal depression, the results of this trial could have been affected by this limitation.

CONCLUSION

In all, postnatal depression is a type of depression affecting approximately 10% of the women in the world, which can be caused by several risk factors including psychological factors, biological factors, obstetric factors, social factors, and lifestyle. Postnatal depression

can have a negative effect on the mother, as well as her children. Treatments available for postnatal depression are divided into four main categories: pharmacological, psychological, psychosocial, and complementary and alternative medicine. A treatment for postnatal depression which falls under the category of complementary and alternative medicine is called music therapy. Although commonly being defined as a licensed music therapist using music to help clients achieve specific personal health goals, the definition of music therapy is still disputed, mostly about whether a therapeutic relationship with a licensed music therapist is necessary or not. There are two types of music therapy, namely active and passive. In terms of these two types, the overlap between music therapy and other forms of music becomes more significant.

Despite that music therapy has been proven to have a positive effect on depression in general, and it can be extrapolated from this that music therapy may also be useful in treating postnatal depression, literature analyzing the use of music therapy on postnatal depression is very limited. The few existing research on this specific topic, although confirming that music therapy has the potential of helping to reduce postnatal depression symptoms, has several limitations, with regard to the relatively small-sized and unrepresentative sample, and the techniques of music therapy which were being used. More research should be done on this topic, to further prove the effectiveness of music therapy on postnatal depression and explore the extent to which it can be effective. Generally, current research and studies are only using group singing as a technique, which is a type of active music therapy, as a treatment for postnatal depression, while other techniques of active music therapy, and passive music therapy should be used in future studies. In addition, almost no current study on this topic highlights the use of a

licensed music therapist, which suggests that the importance of the involvement of a music therapist can also be a research direction, considering the general definition of music therapy.

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