# ADDICTIVE | Letter to the Editor

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# Music Therapy as a Nonpharmacological Intervention for Pregnant Women During COVID-19 Outbreak

## To the Editor:

Most women experience various stresses, such as emotional, physical, and social changes when they are pregnant, especially during this COVID-19 period.<sup>1</sup> Many studies have shown that stressful life events and pregnancy experiences can lead to significant obstetric outcomes including spontaneous abortion, preterm delivery, growth retardation and decreased maternal-fetal attachment.<sup>2,3</sup> In addition, if pregnant women experience increased stress, and pain, it may lead to delay and termination of medical procedures.<sup>4</sup>

Furthermore, to relieve and reduce stress and increase relaxation in pregnant women in this COVID-19 outbreak, various interventions such as pharmacological therapy, massage, aromatherapy, and reflexology have been carried out with fairly good procedures.<sup>5</sup> In accordance with existing recommendations, that pharmacology should be carefully used for both mother and fetus. Therefore, there is one nonpharmacological nursing intervention that is safe enough to be applied to pregnant women, namely through the use of music as a therapeutic modality.<sup>6,7</sup> In the last decade, there are quite a lot of research results and theories that explain that music has been shown to have a therapeutic effect on the body and mind.<sup>8,9</sup> Music can neutralize negative emotions, increase stress thresholds, harmonize inner processes, help patients achieve a state of relaxation and reduce stress.<sup>10</sup> Neuroscience, music can provide esthetic pleasure received by the right brain, which in turn can release endorphins from the suppituitary, thereby reducing physiological responses and relaxation.<sup>11</sup> In addition,

music can change the interaction of the thalamus and reticular activation system, as well as affect emotions, body muscles, and autonomic functions such as blood pressure, heart rate and respiratory rate.<sup>12</sup> Therefore, through this article, I recommend that practitioners use music during the COVID-19 outbreak as an alternative to nonpharmacological nursing interventions, so that enough pregnant women will be helped and reduce their stress and anxiety.

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