

# Antidepressants Versus Music Therapy: Which Treatment Is Better for Treating Depression in Parkinson's disease?

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### Introduction

- The multidisciplinary field of music and medicine is currently being investigated for its role in depression management in Parkinson's disease (PD)
- Treatment of depression in PD is important since depression affects other factors in PD like cognition and mortality<sup>1</sup>
- Antidepressants, the current form of treatment despite having limited trials on PD subjects, are reported to have mixed results in PD populations
- Music therapy, whose studies are also limited in nature, are reported to have positive potential in PD populations
- Ambiguous results of antidepressants in PD patients warrant further research into music therapy as an alternative form of depression treatment in PD.

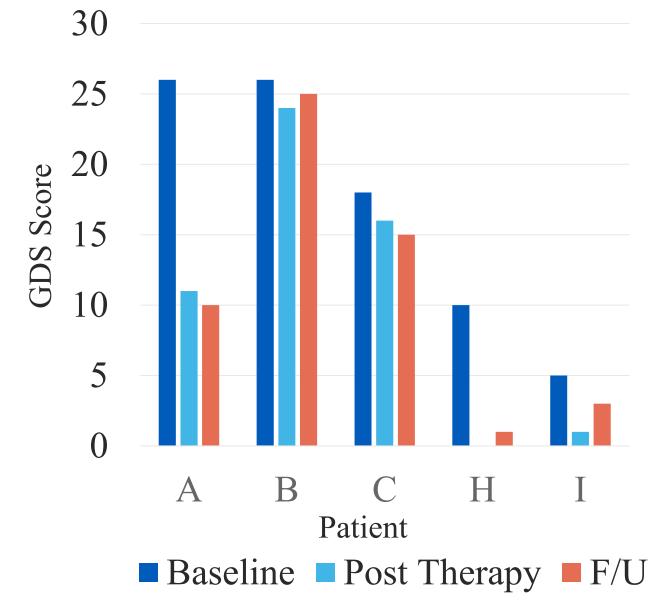
### Methods

This research compares the effects on depression in patients with PD as a result of the use of antidepressants and music therapy. This information was collected by gathering studies that focused on each type of treatment separately and analyzing the numbers produced as a result of the patient-reported outcome measure in depression.

### Results

- Results of a meta-analysis conducted by Daniel Weintraub suggest no difference between antidepressant and placebo treatment in PD depression<sup>2</sup>
- PD patients do not respond as well to antidepressant treatments as non-PD patients<sup>2</sup>
- In The Individual Therapeutic Singing Program for PD (ITSP-PD), the average Geriatric Depression Scale (GDS) scores were significantly lower (p=.018) directly after therapy and then increased in a 6-month follow-up (F/U) after therapy<sup>3</sup>

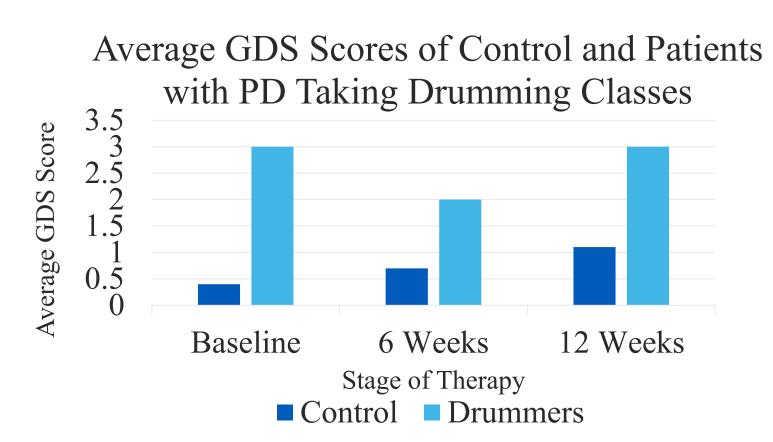




**Figure 1.** The GDS scores of patients with PD that underwent ITSP-PD are shown pre-therapy, post-therapy, and 6 month follow-up.

• A similar trend can be seen when patients with PD took drum circle classes for 12 weeks

• A participant in the drum study said, "I learned the importance of connecting to the group in a joyful way. . . It was great being in a drumming circle instead of a drooling circle"<sup>4</sup>



**Figure 2.** The average GDS scores of the control group and the group that took the classes are shown side by side at baseline, after 6 weeks of classes, and after 12 weeks of classes.

### Conclusions

- Antidepressants can improve depression in PD but have limitations
- Lower GDS scores post-music therapy indicate improved depression in PD patients, but their rise after a while of therapy raises questions about the long-term impacts of music therapy
- More research for effective management of PD depression needs to continue given the lack of studies on this topic and other limitations
- With the same standardized patientreported outcome measure, these two depression management treatments should be compared in future research.



### References

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