

# A Group Singing Program Improves Quality of Life: an International Study

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## ➤ Introduction

People with Parkinson's (PwPs) may experience stigma, isolation, stress and anxiety due to the chronic nature of Parkinson's. Singing therapy has been reported to impact positively on **quality of life (QoL)** in PwPs. This poster reports on an international trial of *Sing to Beat Parkinson's*<sup>®</sup>, a community group singing program, involving PwPs from **Australia, the UK and South Korea** on QoL and mental well-being.



## ➤ Intervention: *Sing to Beat Parkinson's*<sup>®</sup>

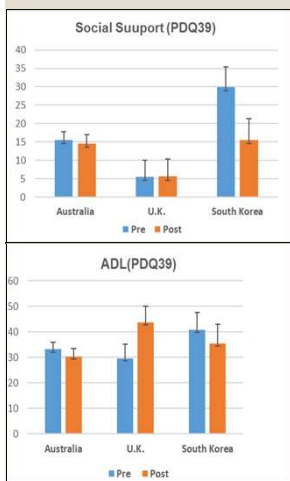
One hour group singing session included: (1) welcome and hello song (5 min); (2) breathing exercises (5 min); (3) vocal warm-ups (5 min); (4) warm-up songs (rounds, simple songs, 10 min); (5) sharing time (e.g., birthday announcement followed by *Happy Birthday* song singing, 5 min); (6) participants' preferred song singing (30 min). Each sessions included the diaphragmatic breathing method; movements (clapping, tapping, etc.), to provide a complex, stimulating and enjoyable singing exercise.



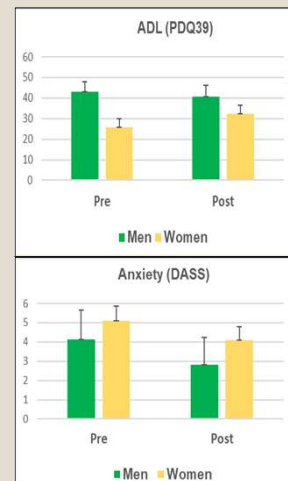
## ➤ Research Methods

PwPs (N=95; mean age=70.26; male 45%; 52% were diagnosed ≤ 5 years ago) participated in a standardized 6-month weekly group singing program. **PDQ39** and modified **DASS21** were administered at baseline and follow-up to assess **QoL** and **mental well-being**, respectively. MANOVA and ANOVAs were performed with significance set as  $p < .05$ .

## ➤ Results



MANOVA showed statistically significant multivariate effects of Time, Country, Time by Country and Time by Gender interactions on QoL. Follow-up univariate ANOVAs revealed main effects of Time on **Stigma** and **Social Support** domains of QoL; both improved. Further, MANOVA revealed a multivariate effect of Time on mental well-being; **Anxiety** and **Stress** significantly decreased from pre-test to post-test. There was a Time by Gender interaction effect for **ADL** ( $F(1, 89) = 5.46, p = .02, \eta_p^2 = .06$ ). There were no differences in pre vs. post test scores in men ( $p > .1$ ) or women ( $p > .1$ ); men had higher ADL scores than women at pre-intervention ( $p < .05$ ), but not at post intervention (i.e. men's ADL was worse than women's before singing)



## ➤ Discussion & Conclusion

After a 6-month weekly group singing, participants experienced **reduced anxiety, stress and stigma** as well as **enhanced social support and daily activity functioning**. Although there were some differences, overall, these positive results were similar in the three participating countries and in both genders. The findings are encouraging; further studies with robust methodology are needed to better understand the effects of group singing for PwPs. As we deal with ageing populations and protracted Parkinson's disease progression in developed countries, **group singing as part of intervention programs can contribute to improving everyday life of PwPs**. This first international singing study with PwPs affirmed that *Sing to Beat Parkinson's*<sup>®</sup> is a beneficial program for **promoting better quality of life and mental well-being**.

