

Clinical Research Results Abstract

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Can singing improve health and wellbeing in COPD? SingStrong: A pilot study

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Chronic Obstructive Pulmonary Disease (COPD) affects up to 500,000 people in Ireland (1). Multiple domains of biopsychosocial health are affected (2). Community-based interventions supporting behavioural change and self-management are advocated (3).

Aim: The aim of this pilot study was to evaluate the efficacy of an 8-week singing intervention, "SingStrong", to improve biopsychosocial wellness in persons with COPD.

Methods: Seventy-eight adults with COPD were recruited from COPD Support groups in Limerick, Nenagh and Ennis. Pre and post-intervention testing performed by physiotherapy and nursing staff comprised the Six-Minute Walk Test (6MWT), COPD Assessment test (CAT), Hospital Anxiety and Depression Scale (HADS), and Spirometry: FEV1, FVC, FEV1/FVC. The intervention was a weekly one-hour class for 8 weeks led by a trained choir leader at each site. This comprised physical and vocal warm-up, breathing exercises and singing. Participants were given a songbook based on their song preferences and CD with vocal and breathing exercises and songs, and encouraged to practice daily. Semi-structured focus groups were conducted at each site post intervention. Parametric or non-parametric t-tests were conducted to establish significance.

Results: Fifty-eight (74.4%) participants who attended at least 4/8 session were re-tested. There was a statistically significant improvement in 6MWT ($p=0.02$), non-significant improvements in CAT ($p=0.24$) and HADS Depression ($p=0.238$), and non-significant dis-improvement in HADS Anxiety ($p=0.34$). All qualitative feedback was positive, with improvements in breathing, quality of life and intervention enjoyment reported.

Conclusion: Singing for lung health has positive implications for persons with COPD. Future longer studies should examine exacerbation level, hospitalisation and medication use.

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References and Clinical Trial Registry Information

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