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HEALTHCARE

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**GROUP SINGING THERAPY**  
IMPROVING THE QUALITY OF  
LIFE OF PATIENTS WITH COPD

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# Foreword

The symptoms of Chronic Obstructive Pulmonary Disease (COPD) are well documented, with sufferers commonly experiencing shortness of breath and a reduced exercise capacity, which limits their ability to lead an active lifestyle. However, less frequently discussed is the association between COPD and certain psychological disorders.

A number of studies have identified that almost 50 per cent of patients with COPD exhibit symptoms of anxiety or depression, which can have a significant negative effect on health related quality of life. Furthermore, as a consequence of reduced mobility, particularly in more severe disease, the ability or confidence to socialise is reduced and decreased morale can contribute to feelings of isolation, which in turn can exacerbate feelings of depression and anxiety.

The psychological effects of shortness of breath and limited mobility are real and treatment of these symptoms should be a priority in increasing the well-being of patients.

The aim of this paper is to examine initial research which suggests that regular group singing sessions can increase quality of life in COPD patients. It will also evaluate the potential of such activities being incorporated into pulmonary rehabilitation programmes and suggest avenues for future research in this area.

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# COPD and its treatment

COPD is an illness characterised by airflow limitation that isn't fully reversible. Sufferers typically display reduced lung function, disrupted respiratory mechanics and consequently report significant dyspnea, or shortness of breath. A huge 3 million people have COPD in the UK, of which just 900,000 have been formally diagnosed<sup>1</sup>.

The symptoms of COPD have been extensively studied and are usually treated through a combination of smoking cessation, bronchodilator medicines, pulmonary rehabilitation, and non-invasive ventilation (NIV) or oxygen administration. The ideal structure of a pulmonary rehabilitation programme has been defined in recent guidelines, a typical programme would involve twice weekly exercise sessions which aim to build endurance and strength through a combination of walking, cycling and resistance training, over a 6-8 week period.



However, physical symptoms aside, COPD can also have significant psychological effects. The stress of a chronic illness, reduced mobility and fear of acute shortness of breath can reduce patients' sense of wellbeing and quality of life. COPD has a high comorbidity with depression and anxiety, with research<sup>2</sup> suggesting that 50 per cent of COPD sufferers display symptoms of anxiety or depression. These symptoms, despite their detrimental effects, are not always addressed.

Most pulmonary rehabilitation programmes focus primarily on building physical strength in a structured setting, as well as providing disease education and exercise training. Aside from advice on how to manage breathlessness, there are often limited resources available in the way of psychological treatment. Often referral to pulmonary rehabilitation is delayed until individuals with COPD reach a stage of advanced lung disease. It has been proposed that early access to rehabilitation would seem desirable and could result in patients gaining considerable benefits from pulmonary rehabilitation facilities at an earlier stage. There have been few studies examining access to treatment to overcome psychological problems, early in the disease or indeed as a facilitator to accepting a referral to pulmonary rehabilitation.

In addition, due to factors not fully understood, many COPD sufferers do not take up pulmonary rehabilitation when such sessions are offered. Providing additional therapies, which can easily be performed in the patient's home without the need of a medical professional, such as home based rehabilitation, could be a future area of exploration in the UK in providing treatment for these individuals. Furthermore, allowing family and friends to accompany patients to treatment sessions could help to encourage patients who lack independence to attend and help them to overcome feelings of isolation<sup>3</sup> that are often associated with COPD.



# Singing and COPD

Patient quality of life should always be a priority. Perfecting a treatment schedule which looks to build self-confidence and nurture a supportive atmosphere between patients is important if we are to improve outlook and morale. Existing literature suggests the potential for group singing therapy to be included in pulmonary rehabilitation programmes, specifically aimed at alleviating anxiety and depression.

Music, and in particular, singing, have long been studied for their positive psychological effects. In practice, it has been found that a large proportion of choristers believe that singing is good for their well-being, and individuals with comparatively low psychological well-being have credited their participation in singing as helping them to cope with serious life-events, or personal challenges which have threatened their well-being<sup>4</sup>.

The benefits of singing have been explored in individuals with COPD. A group of patients from Royal Brompton Hospital, when exposed to weekly singing lessons, displayed significantly reduced anxiety in comparison to controls<sup>5</sup>. In addition, an investigation by Bonilha et al (2008) examined the effects of weekly singing sessions and handicraft lessons on patient

morale. Following a schedule of 24 sessions both groups reported increased quality of life, illustrating the positive effects of group participation on well-being.

The social nature of singing lessons not only increases interaction but encourages the formation of relationships. Research has also provided extensive anecdotal reports of enjoyment and friendship from singing participants, as well as a feeling of community<sup>7</sup>.

In addition to the social benefits received from a programme of this nature, regular singing sessions could possibly improve how individuals with COPD manage their breathlessness and indeed have important psychological benefits, however, the effects in terms of symptom management and functional limitation have yet to be firmly established<sup>8</sup>. It is important to consider the broad benefits of any interventions, effectiveness of treatment should not solely be monitored relative to lung function but should incorporate improvement in social factors such as well-being and activities performed on a daily basis. Therefore, when exploring new treatment methods, the same success indicators should apply.

In a recent study conducted at Canterbury University, patient testimonials regarding the benefits of singing included:

“The friendship, team spirit etc. is wonderful ...personally I have benefited (sic) from seeing friends, which makes me feel cheery.”

“As I am retired, the social ‘get together’ has been wonderful.”

“There’s always a welcoming, comforting atmosphere at singing.”



# Next Steps

As pulmonary rehabilitation sessions are usually undertaken within groups of 10-12 patients, it could prove fruitful to incorporate additional vocal training into treatment programmes to investigate the effects of singing on well-being on a wider scale. In particular, it would be interesting to examine whether there is additional benefit to rehabilitation programmes with an integrated singing element. The research conducted thus far, whilst compelling, has been criticised for utilising small sample sizes, an issue that must now be addressed in further study.

Some existing pulmonary rehabilitation programmes train patients in deep breathing techniques to aid the management of acute breathlessness, which can often be worrying and debilitating. Singing lessons similarly promote deep breathing control, it would be intriguing to investigate whether these two mechanisms, when paired together, further assist individuals in combating dyspnoea. If breathing controls used in singing were proven to help patients to transfer these controls into day to day life, these breathing exercises could prove invaluable to COPD sufferers.

Aside from investigating the psychological effects of singing, it may also prove interesting to examine the relationship between singing and other physiological metrics such as lung capacity and mobility. While initial research<sup>9</sup> has suggested a link between singing and the preservation of lung capacity, (which would be significant as COPD is typically a degenerative condition with lung capacity steadily decreasing over time) investigation in this area is in its infancy and further empirical proof in the form of a robust and statistically significant result is needed to provide true validity to these claims.

With COPD responsible for over 25,000 deaths each year in the UK, and with nearly 1 million diagnosed sufferers, practitioners must continue to explore alternative treatment schedules with the aim of further improving patient quality of life. In particular, investigating the efficacy of alternative treatments which address the possible psychological effects of COPD is likely a worthwhile avenue of research.

# Baywater Healthcare

Baywater Healthcare is an independent supplier of homecare services to over 30,000 patients across the UK and Ireland. By working extensively with sufferers of COPD to supply home oxygen therapy, Baywater Healthcare aim to provide their patients with a high degree of independence, mobility and increased quality of life.

Baywater work to encourage a sense of community, social support and group interaction between their patients.

Baywater Healthcare is conducting singing sessions for a small group of COPD patients, to view a 'how to sing guide' and vocal lesson, visit <http://bit.ly/1yt3hec>

## References

<sup>1</sup>Healthcare Commission (2006) Clearing the air: a national study of chronic pulmonary disease. London Healthcare commission.

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<sup>3</sup>American Thoracic Society and European Respiratory Society guidelines. Standards for the Diagnosis and Management of Patients with COPD.

<sup>4</sup>Clift, S., Hancox, G., Steward, D. (2010) Choral singing and psychological wellbeing: Quantitative and qualitative findings from English choirs in a cross-national survey. Journal of Applied Arts & Health, 1, 1, 19-34 (16).

<sup>5</sup>Lord, V.M., Cave, P., Hume, V., et al (2010) Singing teaching as a therapy for chronic respiratory disease - randomised controlled trial and qualitative evaluation. BMC Pulmonary Medicine, 10, 41.

<sup>6</sup>Bonilha, A.G., Onofre, F., Viera, L.M., Prado, M.Y., & Martinez, J.A. (2008) Effects of singing classes on pulmonary function and quality of life of COPD patients. International Journal of COPD 4, 1, 1-8.

<sup>7</sup>Clift, S., Morrison, I., Skingley, S., Page S., Coulton, S., Treadwell, P., Vella-Burrows., Salisbury, I., Shipton, M. (2013) An evaluation of community singing for people with COPD. <http://www.canterbury.ac.uk/Research/Documents/COPDSummaryReport.pdf>

<sup>8</sup>American Thoracic Society and European Respiratory Society guidelines. Standards for the Diagnosis and Management of Patients with COPD.

<sup>9</sup>Clift, S., Morrison, I., Skingley, S., Page S., Coulton, S., Treadwell, P., Vella-Burrows., Salisbury, I., Shipton, M. (2013) An evaluation of community singing for people with COPD. <http://www.canterbury.ac.uk/Research/Documents/COPDSummaryReport.pdf>

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