A randomised controlled study of the effectiveness of breathing retraining exercises taught by a physiotherapist either by instructional DVD or in face-to-face sessions in the management of asthma in adults

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Plain English summary

Breathing retraining exercises in the management of asthma in adults

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Most adults with asthma have symptoms that affect their lives, despite taking appropriate medications, and many are interested in non-drug approaches. We compared breathing retraining delivered through ‘face-to-face’ physiotherapy sessions with both a self-guided programme [digital versatile disc (DVD) plus booklet] of breathing retraining that could be carried out at home and usual care. Adults with incompletely controlled asthma in primary care were randomised into one of these groups. They were assessed before starting the intervention and at 3, 6 and 12 months afterwards for asthma quality of life (QoL) and were also assessed with other questionnaire and physiological measures; in addition, qualitative interviews were carried out to obtain the perspectives of patients and an economic evaluation was performed.

We recruited 655 volunteers from general practice surgeries. QoL significantly improved in both active groups compared with usual care, with equivalent improvements between active groups. Patients reported feeling that the exercises were helpful and acceptable, although some participants who received the DVD would have appreciated talking to a physiotherapist. Lung function and inflammation were unaffected. There were consistent improvement trends in the active arms for symptom scores, rescue medication use, anxiety and depression and asthma attacks, but these improvements were not statistically significant and so could have occurred through chance. Asthma-related costs were lower in both of the active groups.

People with asthma felt and functioned better following breathing retraining delivered by either a DVD or a physiotherapist and programme costs were exceeded by savings from better asthma control, with the DVD being most cost-effective. Patients still had asthma but coped with it better. These simple exercises can be carried out at home and have the potential to improve asthma control and save money.
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