Self-management for COPD?

Why does it generate negative connotations?

A recent NHS mandate,¹ calls for supporting and empowering people with long-term conditions to help patients manage their condition and reduce hospital admissions. In chronic obstructive pulmonary disease (COPD) this may mean ensuring individuals are actively engaged in self-management, to complement pharmacological care and enhance outcomes. Delivery of pulmonary rehabilitation, that assists patient self-management and provision of self-management education and support to increase self-efficacy and help patients with COPD to better manage their condition, is widely recommended in health policy guidelines.² There is good evidence that patients with COPD want to understand their condition and manage breathlessness and exacerbations.³

EXISTING EVIDENCE FOR COPD SELF-MANAGEMENT PROGRAMMES

The evidence for the benefit of self-management in COPD is patchy. A Cochrane review⁴ suggested that self-management education may reduce hospital admissions but because of heterogeneity among the included studies definite conclusions could not be drawn. The majority of the interventions in the included studies were non-theory-based self-management plans or structured self-management education programmes. Hence, one review recommendation was that future self-management programmes should be designed using behaviour change theory. Our recent pilot study⁵ of a COPD-specific self-management education programme based on the self-efficacy theory, a major component of the sociocognitive theory, showed that the intervention had the potential to be useful and cost effective. The findings supported the self-efficacy theory as the intervention-group participants adopted core self-management skills. These included as goal-setting and action planning, which enabled the practice of self-management behaviours through the process of performance mastery (practising skills through use of action plans) and modelling (emulating others) provided by the study peer leaders.

WHAT HAS BEEN SAID ABOUT COPD SELF-MANAGEMENT PROGRAMMES?

In contrast, last year an editorial in the *Lancet*⁶ questioned the usefulness and safety of self-management programmes in COPD altogether, and stated 'The widespread

implementation of COPD self-management programmes should await an evidence base that ensures patients are not put at risk. More recently, at the Primary Care Respiratory Society UK national conference in 2013, when evidence of benefit for self-management was discussed, it was suggested that caution needs to be applied when considering self-management in COPD. These conclusions were drawn from the negative findings of two recent studies claiming to deliver a 'self-management intervention'⁷ and a 'supported self-management' intervention,⁸ both directed at patients with severe COPD; the aim of both studies was to demonstrate a reduction in time to hospital admission for acute exacerbations.

However, we believe that these interventions were in fact disease-management programmes that included only one component of a self-management programme, namely, education. Bourbeau⁹ has stated a definition for disease management as a '*system of coordinated healthcare interventions and communications for populations with conditions in which patient self-care is significant*'. In Fan's study⁷ patients received self-management educational sessions in a prescriptive and instructional format, based on the Precede Proceed model⁹ of health programme planning and evaluation with a focus on exacerbation management and an action plan from a case manager. This study had to be terminated early because of an excess of patient deaths in the intervention group; however, the reasons for this excess mortality have not been determined. Bucknall's⁸ intervention comprised self-management (empowering patients mainly through didactic teaching sessions) and case management with a focus on exacerbation management by use of an action plan through self-regulation: a model of disease management. This meant being observant and making judgements based on observation and reacting appropriately to achieve a goal.¹⁰ The intervention was not effective and only 42% of patients who received the intervention were able to respond appropriately to the signs and symptoms of an exacerbation. Delivery of a prescriptive or didactic form of teaching is not enough to build self-efficacy in patients to carry out action plans to manage exacerbations.

Based on the above, we maintain that these two studies were disease-

management programmes, implementing only one component of a self-management programme: education. These findings should not therefore be generalised to self-management programmes.

WHERE NEXT FOR SELF-MANAGEMENT IN COPD?

Being clear about the terminology may further help to eliminate some of the negative connotations associated with self-management in COPD. There is no universal definition for the term 'self-management'. We have adopted the definition given by Barlow:

*'Self-management refers to an individual's ability to manage symptoms, treatment, physical and psychosocial consequences and lifestyle changes inherent in living with a chronic condition.'*¹¹

Effective self-management encompasses the ability to monitor one's condition and to affect the cognitive, behavioural, and emotional responses necessary to maintain a satisfactory quality of life.

A unique feature of self-management interventions is that they are built on the self-efficacy theory: '*beliefs in one's capabilities to organize and execute the courses of actions required to produce given attainments*'⁹ (setting it apart from educational and health promotion interventions). The effects of self-management are achieved by building self-efficacy through the processes of performance mastery, modelling, social persuasion, and interpretation of symptoms leading to the adoption of core self-management skills: problem solving, action planning, decision making, utilising resources effectively, and forming effective partnerships with healthcare providers.⁹

A 'self-management programme' aims to support and to:

*'... teach skills needed to perform a specific medical regimen, guide health behaviour change, and provide emotional support for patients to control their disease and function better.'*⁹

'Self-management support' has been defined as:

'The systematic provision of education and supportive interventions by healthcare staff

to increase patients' skills and confidence in managing their health problems, including regular assessment of progress and problems, goal setting, and problem-solving support.¹²

Therefore the provision of self-management support could include delivery of self-management programmes and/or self-management plans or advice to patients capable of self-management. Professional support aimed at these patients can improve illness management and promote independence.

In contrast, a 'disease-management programme' is directed more at the clinician level for patients with increasing severity of illness, what clinicians do through multidisciplinary communication and coordination to manage chronic conditions and enable self-management. Schrijvers¹³ incorporated several definitions given for disease-management programmes and proposed a new definition to facilitate communication between researchers, disease-management programme leaders, and policy makers:

*'Disease management consists of a group of coherent interventions designed to prevent or manage one or more chronic conditions using a systematic, multidisciplinary approach and potentially employing multiple treatment modalities. The goal of disease management is to identify persons at risk for one or more chronic conditions, to promote self-management by patients and to address the illnesses or conditions with maximum clinical outcome, effectiveness and efficiency regardless of treatment setting(s) or typical reimbursement patterns.'*¹³

Thus, patient self-management would be one outcome within a disease-management programme through the working together of several components such as provision of self-management support (for example, using the self-management programme plan or strategies), and other support such as reorganisation of health services (for example, using case manager or clinical decision support tools), or using community resources. Consequently, the evaluation of a multicomponent disease-management programme and its findings should not be generalised to a self-management programme, the latter being only one component in a bigger disease-management model.

Figure 1 illustrates the relationship between disease management and self-management support intervention.

We hope this clarification will encourage readers to make a distinction between the terms and the meanings assigned to them. A clear understanding of the terms will enable readers to not generalise study findings of disease-management programmes onto self-management programmes and vice versa. Clinicians may find the terms useful to identify patients who could benefit from participating in either disease management or self-management support interventions. The referral of suitable and eligible patients may help in improving patient participation in studies evaluating these interventions and improve health outcomes.

We further propose that a universally common definition of self-management is important to improve communication between researchers, clinicians, and policy makers, creating a common ground to communicate and use research evidence for practice.

Figure 1. The relationship between disease management and self-management support interventions.

ADDRESS FOR CORRESPONDENCE

Ratna Sohanpal

Centre for Primary Care and Public Health, Blizard Institute, Barts and the London School of Medicine and Dentistry, Queen Mary University of London, 58 Turner Street, London E1 2AB.

E-mail: r.sohanpal@qmul.ac.uk

CONCLUSION

COPD is known to be a heterogeneous disease and a patient requires complex management as the condition deteriorates. We feel that more work needs to be done in self-management for COPD. We have begun by clearing the confusion around the terms 'self-management', 'self-management support', and 'disease management'. Research studies must consider the severity of the population they are targeting when delivering self-management interventions and what might be achieved. When describing the components of the intervention it is important to remember that behavioural interventions are not necessarily benign and to watch out for adverse events.

Similar to other chronic conditions, self-management in COPD is likely to be important for improved quality of life and condition management. We should, therefore, focus our attempts to build more robust and reliable evidence for self-management in COPD.

Ratna Sohanpal,

Doctoral Research Fellow, Centre for Primary Care and Public Health, Barts and the London School of Medicine and Dentistry, Queen Mary University of London, London.

Eleni Epiphaniou,

Senior Research Assistant, Centre for Primary Care and Public Health, Barts and the London School of Medicine and Dentistry, Queen Mary University of London, London.

Stephanie Taylor,

Professor in Public Health and Primary Care, Centre for Primary Care and Public Health, Barts and The London School of Medicine and Dentistry, Queen Mary University of London, London.

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