Partners in COPD management in the primary care setting

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The development, integration and training of a team of partners in COPD care can reduce a patient's behavioural risk factors and optimise positive behaviour change.

KEY POINTS

- Primary care is the most appropriate setting to co-ordinate care for patients with COPD because it is widely accessible, person-centred and addresses both physical and emotional health needs.
- An estimated 50% of patients with chronic disease do not adhere to recommended medications, and similar high rates of nonadherence have been reported in studies of patients with COPD.
- Practitioners should be aware of the significant impact of anxiety and depression on patients with COPD and encourage and facilitate patient engagement with effective treatments.
- Incorporating in practice the concepts of assessing readiness, tailoring information, assessing health literacy, motivational interviewing and goal setting to improve the outcomes of patients with COPD is encouraged.
- Although patients' symptoms need to be well managed when end of life is approaching, it is also important to ensure personal, social and psychological support is in place.
- Carers of patients with COPD report that they would feel better equipped to perform their duties with education, inclusion and skills training.

Chronic obstructive pulmonary disease (COPD) is a progressive and disabling respiratory disease affecting millions of people worldwide.[1] Whereas no medical treatment can reverse COPD, multiple interventions are available that can reduce symptoms and functional impairments in daily life and increase (social) wellbeing and quality of life.[1] Treatment choices depend not only on how the disease progresses, the presence of symptoms, the functional impairment and the diminished quality of life, but also on comorbidities and the capability of the patient to self-manage.[2]

Primary care practitioners are often confronted with patients with multimorbid chronic disease, and understand that the high prevalence of comorbidities such as cardiovascular diseases, diabetes, anxiety and depression in those with COPD demands a broader view than that of COPD alone. Primary care is the

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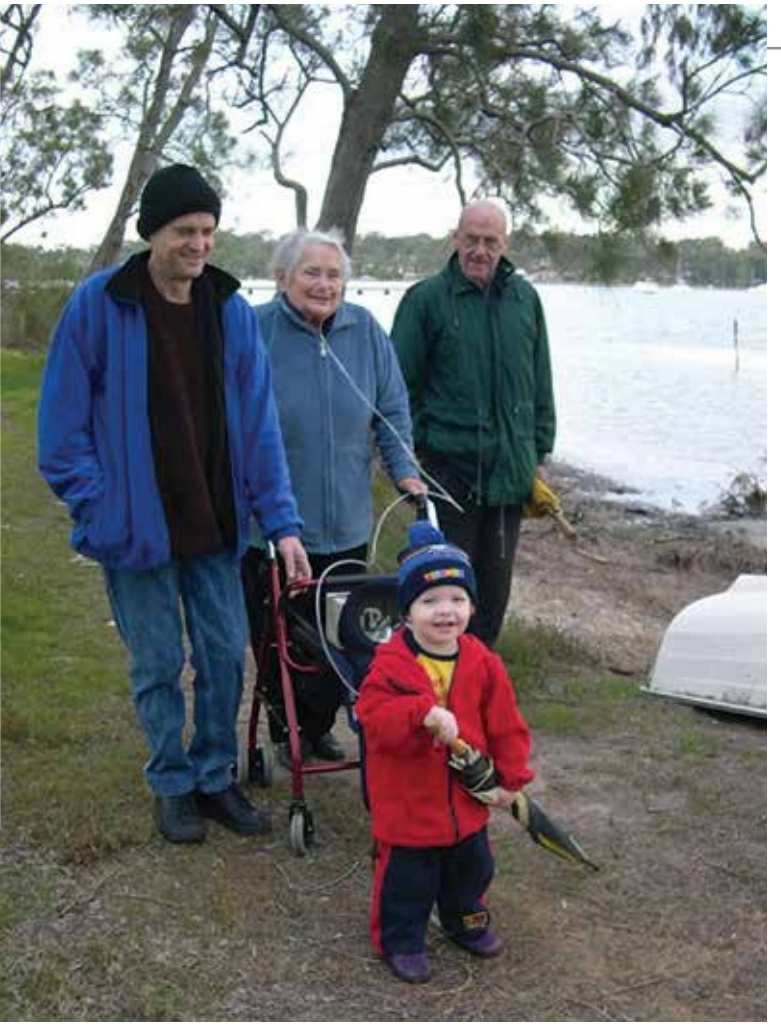

most appropriate setting to co-ordinate care for patients with COPD because it is widely accessible, person-centred and addresses both physical and emotional health needs.[3] The primary care interface not only provides the most logical opportunity for managing the progression of COPD in patients, from early diagnosis to end-of-life care, but also an appreciation of this illness in the context of other comorbidities and their psychosocial circumstances.

Comorbidities are the rule rather than the exception in COPD,[4,5] so specific interventions like smoking cessation, respiratory medications, oxygen therapy and pulmonary rehabilitation need to be supplemented with attention to other diseases as well as more generic and psychological support. The outcomes of respiratory and activity/exercise assessments together with mental health and other screening questionnaires can all guide the GP to make these treatment decisions.[1] However, in this decision process consideration of the patient's beliefs and motivations as well as knowledge and health literacy is important. If a patient is unwilling to start a certain therapy or does not know why it is recommended or how best to use it, starting this treatment will most likely end in nonadherence and thus risk treatment failure.[6] Instead, efforts should be made to explore treatment barriers and, if possible, remove them. It is of utmost importance to make the patient a partner in care.[7]

With COPD, as with other chronic diseases, it is preferable that patients take responsibility for their lifestyle and at least part of their day-to-day treatment. Whereas some patients may have adapted adequately to their disease (e.g. made positive lifestyle changes), often this does not occur.[8] Making lifestyle changes and taking responsibility for day-to-day treatment (e.g. proper inhalation of medication and self-treatment of exacerbations), as well as planning and enacting responses to both acute flare-ups (exacerbations) and advancing disablement, require patients to make behavioural changes.[2] The use of behavioural change techniques becomes critical in increasing a patient's responsibility for their own health,[9] and is an area in which an appropriately skilled practice nurse could have a key role.

In this article we discuss, in the context of COPD:

- how the patient can be motivated and trained to be a partner in their own care
- facilitators and barriers to patient adherence, using the example of mental health problems to elucidate the complexity of the relationship
- the role of behaviour change methods and identification of opportunities to apply these strategies in primary care
- practical measures for improving adherence and collaborative management
- the role of a team of health professionals and the carer in optimising effective partnerships at differing stages of care.

Adherence

Optimal management of COPD incorporates the regular performance of health-related behaviours such as smoking cessation, appropriate use of medication, physical exercise, maintenance of a healthy diet and recognition of signs of exacerbation.[1] Adherence to such management steps is a worldwide problem among those with chronic disease(s). A WHO study estimated that in developed countries about 50% of patients with chronic disease(s) do not adhere to recommended medications,[10] and a large meta-analysis evaluating data from 1948 to 1998 reported that approximately one in four patients were nonadherent.[11] Similar high rates of nonadherence have been reported in studies in patients with COPD. It is useful to consider contributing factors as those relating to the disease, the treatment, the patient and the relationship between healthcare provider and patient, as noted below.

- Disease characteristics acting as barriers to adherence include the progressive nature of the illness, poorer prognosis and a perceived absence of clinical symptoms.[12-16]
- Treatment characteristics such as polypharmacy, higher dosing frequency, higher medication costs and side effects decrease adherence, whereas orally administered medication facilitates adherence.[12-16]
- In terms of patient characteristics, older age and better social support increase adherence, whereas better quality

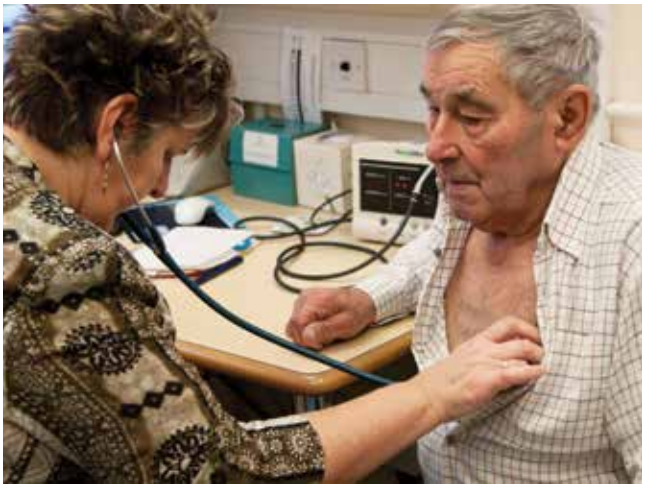

Figure. Primary care is the most appropriate setting to co-ordinate care for patients with COPD as it is widely accessible, person-centred and addresses both physical and emotional health needs.

of life, fewer clinical symptoms and the presence of psychiatric problems contribute to nonadherence.[12-16]

- Aspects of the health provider–patient relationship that facilitate adherence include higher quality communication, hospitalisation, patient perception of clinician expertise, specialist care and closer follow up.[12-16]

Hence, clinician partners in care should be aware of the factors or strategies that may facilitate or hinder the required behaviour change associated with treatment adherence. The influence of partners in care in facilitating adherence also extends beyond the clinic, as shown in a recent study that found positive associations between the presence of a carer and adherence to medication, as well as success in smoking cessation.[17]

Effects of anxiety and depression on adherence

The mental health status of the patient with COPD is a predictor of nonadherence as well as health outcomes.[18,19] The prevalence rates of anxiety and depression in patients with COPD are high. A recent review estimates that approximately 40% of patients with COPD experience clinical levels of anxiety and depression,[20] much higher than the global rate of less than 10% in the general population[21] and greater than in many other chronic diseases.[22]

Patients with COPD have a relative risk of 1.69 of developing depression.[23] This risk increases with COPD severity, with patients classified as having the most severe disease being twice as likely to be depressed than those with mild COPD.[24] It is not surprising, therefore, that depression is especially high among patients with COPD requiring oxygen[25] and at end-stage.[22] The relative risk of patients with COPD developing anxiety is 1.85.[26] This risk is elevated further with an increase in disease severity, and dyspnoea in particular.[26] Furthermore, anxiety and depression often occur together in both the general population and those with COPD, compounding the negative impact.[27,28]

Recent literature has focused on the negative impact of the comorbidities of anxiety and depression on the management of COPD. The presence of clinically significant symptoms of anxiety and/or depression is associated with reductions in adherence to treatment,[18,19] quality of life,[29] exercise capacity[30] and productivity,[31] while also increasing the risk of exacerbation,[32] healthcare utilisation,[31,33] disability and mortality.[34,35]

Despite the major impact of mental health problems on prognosis and adherence to management strategies by patients with COPD, anxiety and depression remain underdiagnosed and undertreated in this population.[36] Opportunities exist in the primary care setting to address these problems. To achieve better outcomes, doctors, nurses, allied health professionals and patients should be trained to recognise anxiety and depression symptoms. More routine screening for mental health issues may help to address the underdiagnosis of these problems among patients with COPD. Psychological distress screening tools such as the K10, Depression Anxiety Stress Scales (DASS), SPHERE and Patient Health Questionnaire-9 (PHQ-9) are recommended by peak primary and mental healthcare bodies and are brief and readily available for use in the primary care setting.[37,38]

Providers should be aware of the significant impact of anxiety and depression on patients with COPD and encourage and facilitate patient engagement with effective treatments such as psychiatric medication, cognitive behavioural therapy, pulmonary rehabilitation and self-management approaches.[36] Since there is not always the capacity in general practice to implement such treatments, a concomitant increase in services from other primary or secondary care providers may be required. These include those available through the MBS (Better Access) initiative (access to psychiatrists, psychologists and mental health-trained GPs) and some chronic disease management and mental health programs administered by the Primary Health Networks.

Changing behaviour

Readiness for change

Numerous opportunities exist within the clinic to enable positive behaviour change. Primary care clinicians can assess 'readiness for change', a concept based on the Transtheoretical Stages of Change Model.[39,40] Health information and communication strategies can then be linked with tailored health intervention, which in turn can be customised to the readiness of the patient with COPD for change. Developers of the model propose that behaviour change interventions are more effective if stage-matched and suggest the use of 'processes of change' (Table), a group of strategies to facilitate progression through the stages.[40] Readiness assists the uptake or reduction of target behaviours and is already widely used in smoking cessation and physical activity interventions.[41]

Motivation

Although there is increased acknowledgement of the integral role of patient self-management, it is also known that the motivation of patients with COPD is associated with the success of these interventions.[42] Accordingly, recent approaches to behaviour change in COPD have used the strategy of motivational interviewing,[43] an evidence-based, collaborative, person-centred method familiar to GPs that elicits and increases motivation for change.[44-46] In COPD this approach has been linked with an improved therapeutic relationship between patient and interventionist, subsequently facilitating an increase in quality of life and patient acceptance.[43]

Health literacy

An additional factor in the quality of the therapeutic relationship is the patient's level of health literacy, defined as the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions.[47] It includes a set of skills that influences the patient's motivation and ability to find, understand and effectively use health information.[48] Low health literacy may lead to misunderstanding of instructions, which can impact on adherence to medical interventions.[49] Screening allows evaluation of the patient's health literacy as an asset to be used or a clinical risk to be addressed.[48] This assessment informs the tailoring of core messages and management strategies.[48]

5As framework

Primary healthcare practitioners are already familiar with the concepts of assessing readiness, tailoring information, assessing health literacy, motivational interviewing and goal setting as key components of the 5As framework for addressing behavioural risk factors (ask, advise, assess, assist and arrange),[50] especially for cigarette smoking and assessing alcohol consumption. Incorporating

TABLE. 'PROCESSES OF CHANGE' AND THEIR RELATIONSHIP TO THE 'STAGES OF CHANGE' MODEL*

Stage of change	Characteristics of patients with COPD	Processes of change (in bold) with examples of use
Precontemplation	Not considering change	**Consciousness raising** • Personalise risk and encourage self-exploration and re-evaluation of behaviour **Dramatic relief** • Explore issues of grief, loss and role changes from COPD • Encourage the expression of feelings and solutions to reduce negative emotions • Assess mental health **Environmental re-evaluation** • Discuss the impact on valued others
Contemplation	Ambivalent regarding change	**Self re-evaluation** • Assess personal model of COPD/illness perception • Encourage evaluation of pros and cons of behaviour change • Identify and promote new, positive outcome expectancies
Preparation	Planning to act	**Self and social liberation** • Encourage belief that one can change; create conditions for change • Identify and assist in problem-solving obstacles • Identify social support • Verify that the patient has the skills for behaviour change • Encourage small initial steps
Action	Practising new behaviour	**Use and foster social support and helping relationships** • Boost self-efficacy to enable contingency management • Provide reinforcement for positive steps **Counter-conditioning** • Discuss substituting problem behaviours with positive ones **Stimulus control** • Discuss removing triggers/cues for unhealthy behaviours
Maintenance	Sustaining new behaviour	**Continue positive reinforcement and social support** • Reinforce internal rewards • Plan for follow-up support – institutional and social **Stimulus control** • Discuss removing triggers/cues for unhealthy behaviours • Discuss relapse prevention **Maintain self-efficacy**

*Adapted from Prochaska & Velicer (1997).[40]

these concepts to improve outcomes for patients with COPD (such as improved adherence to physical activity recommendations) is to be encouraged and supported.

Patient–provider communication

Health practitioners may further facilitate patient adjustment by using principles drawn from psychological theories concerning behaviour change. Although there are numerous models (e.g. Social-Cognitive Theory, Health-Belief Model), good quality patient–provider communication is an essential key to the practical application of each of their principles. This communication facilitates model commonalities such as knowledge and understanding, personalisation, perceived susceptibility, beliefs, self-efficacy, intention, perceived resources and motivation. For example, patient concerns about COPD medications independently predicted nonadherence in a recent study.[51]

Illness perception is another prudent factor to consider in the communication process as it concerns how patients assess living with a disease.[52] It incorporates cognitive and emotional responses to perceived threat to one's health as well as cause, timeline, consequences, control and identity.[53,54] These perceptions can be modified by interactions with health practitioners, potentially restructuring the personal models of illness of the patient with COPD[52] and influencing adherence,[51] self-management and health-promoting behaviours such as attendance, and response to pulmonary rehabilitation.[55-57]

Further examples can be seen in the personalisation of risk communication, which leads to more accurate risk perception, improved knowledge, increased uptake of screening tests and more informed patient decision making.[58]

Clinical guidelines for general practice have incorporated numerous practical applications of behaviour change models such as highlighting the benefits and costs of prevention and treatment strategies, patient involvement in decision making and emphasising the positive impact of effective doctor–patient interaction.[59]

End-of-life considerations

Possibilities for positive influence on behaviour change remain relevant in the later stages of a patient's illness. Although a patient's symptoms need to be well managed when end of life is approaching, it is also important to ensure that personal, social and psychological support is in place.[60,61] Unfortunately, dying is often not discussed and, therefore, preparations for a 'good' death are not initiated,[62] or start too late.[60] Four reforms have been proposed to facilitate a comfortable death:

- there is more public discussion about the limits of health care as death approaches, and what we want for end of life
- personal wishes are defined
- assurances are made that personal wishes are respected
- services for those dying focus more on dying at home.[60]

End-of-life care does not attempt to lengthen or shorten the patient's life, but aims to optimise quality of life for the patient.[63] Consequently, topics such as prevention, cure and rehabilitation acquire less importance.[60] Discussion of end-of-life wishes could be initiated:

- during health assessments for people aged over 75 years
- as part of assessment and care planning for people in aged-care facilities and those receiving home-based care packages
- during hospital admissions of people who are assessed as likely to die in the next 12 months.[60]

Hospitalisations may be used as a screening tool for transition to palliative approaches in the community for patients late in the clinical course of COPD.[64] A simple tool, the Karnofsky Performance Status (KPS) scale, is often and effectively used in cancer care and palliative care, since progressively worsening scores on this scale are indicative of poorer prognosis. This tool can be easily applied to people with severe chronic disease; the Australian adaptation (AKPS) has been validated in the community setting in patients with various chronic diseases.[65]

GPs and their practice staff may find it useful to become familiar with the providers of their local palliative care services and find out what they can offer, in particular for their patients with end-stage COPD.

The importance of carers

A central partner in the management of COPD is the patient's carer. Family members and friends are the main providers of home care, with one study indicating that more than 70% of patients with COPD have at least one informal carer.[66] The presence of a carer has been linked with better treatment adherence, decreased smoking and fewer emergency visits by patients with COPD.[17,67]

Although the burden of this supportive role is significant and often neglected,[68] carers themselves report that they would feel better equipped to perform their duties with education, inclusion and skill training.[69] Specifically, carers of patients with COPD have expressed the need for better understanding and training concerning the management of anxiety and panic, helpful and safe activities, quality of life facilitation and clarification regarding expectations for the future.[69] Older carers in particular have lower health literacy and less knowledge regarding COPD, and, therefore, they require more education on symptom management and pharmacological support.[70]

Carers' lack of understanding of the disease and prognostic uncertainty are impediments to symptom recognition and management in end-stage COPD.[71] Appropriate carer involvement and training may potentially address each of these needs and facilitate better patient management in the home. To this end, the COPD-X guidelines include carers at numerous points of management, such as discharge planning. Assessing the patient's readiness to go home should involve an evaluation of whether a carer is available as well as the carer's understanding and ability to administer medications.[72] It is at this point especially that

communication between hospital care providers and the primary care team assumes even greater importance. This should not be seen as a one-way information street (from hospital staff to GP), but timely discussion among hospital and primary care staff as well as the carer and patient should be the invariable goal. Similar evaluation and integration of the carer can also occur in the primary care setting and clinicians may also assist carers with local support services, given the burden and distress often accompanying this role.[68]

Conclusion

The development, integration and training of a team of partners in COPD care can reduce behavioural risk factors and optimise positive behaviour change. Opportunities within primary care will expand as practitioners within this setting recognise and value their potential role as behaviour-change agents. Teamwork with the patient, their carers and across providers and services allows further integration and consolidation of positive COPD management behaviours. MT

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A list of references is included in the website version of this article (www.medicinetoday.com.au).

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