

# Managing respiratory disease: The role of a psychologist within the multidisciplinary team

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## Abstract

The diverse and evolving role of a psychologist within a respiratory multidisciplinary team (MDT) is described, providing a working model for service provision. The rationale for appointing a psychologist within a respiratory MDT is presented first, citing relevant policy and research and outlining the wider psychosocial impact of respiratory disease. This is followed by an insight into the psychologist's role by highlighting important areas, including key therapy themes and the challenge of patient engagement. The way in which the psychologist supports the collective aims and aspirations of respiratory colleagues to provide a more holistic package of care is illustrated throughout.

## Keywords

Respiratory disease, clinical psychologist, multidisciplinary team, self-management, psychologist role

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## Introduction

Chronic obstructive pulmonary disease (COPD) is the second most common cause of emergency admission to hospital and is one of the most costly diseases in terms of acute hospital care.<sup>1</sup> Asthma also poses clear resource pressures on the healthcare system<sup>1</sup> with a need for improved asthma management in order to prevent avoidable deaths.<sup>2</sup> This article focuses upon the contribution of a psychologist in addressing the biopsychosocial needs of this chronically unwell population. The policy and research context are cited in order to examine the case for a suitably qualified psychologist within a respiratory team.

## Why have a psychologist within a respiratory multidisciplinary team?

### *Impact of respiratory conditions . . . beyond the physical*

Many people who live with respiratory conditions, such as complex asthma or COPD, find their lives are

affected in multiple ways. While the impact is unique for each individual, key areas of difficulty include fear of breathlessness, reduced activity levels, lowered self-efficacy and energy, disrupted relationships, anxiety and significantly lowered mood.<sup>3,4</sup> Depression affects about 40% of people with COPD<sup>5</sup> and anxiety affects about 34%.<sup>3</sup> In addition, there is a significantly high prevalence of anxiety and depression in people with asthma (six times higher than the

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general population<sup>6</sup>), particularly in people with severe, difficult to control asthma.<sup>7</sup> For many, the physical symptoms of breathlessness are exacerbated by anxiety and panic in a vicious cycle of escalating breathlessness, physiological arousal and further panic.<sup>8</sup> The meaning of the lung condition for an individual can be informed by illness perceptions not necessarily supported by medical understanding, and thus misinterpretation of bodily sensations can fuel anxiety and fears.<sup>9</sup>

There is increasing evidence for the link between respiratory health and mental health<sup>1,2,10–12</sup> as emphasized in the 2012 King's Fund report.<sup>13</sup> Independent of COPD severity, co-morbid mental health difficulties are associated with worse health status and breathlessness.<sup>14</sup> Depression or anxiety has a greater impact than disease severity on functional status and quality of life for people with COPD.<sup>15</sup> In addition, people with mental health difficulties are more likely to smoke<sup>16</sup> (despite their chronic lung disease), are less likely to adhere to treatment plans (with poorer medication compliance) and have less energy and motivation for self-management (including pulmonary rehabilitation [PR] and quit smoking support).<sup>3,17,18</sup> Given these challenges, it is unsurprising that co-morbid mental health problems increase patients' use of health services for their physical problems. For example, COPD patients with mental health problems have more than 50% more acute exacerbations per year,<sup>19</sup> experience higher rates of hospitalization and have been found to spend twice as long in hospital than those without mental health problems.<sup>20</sup> The additional healthcare costs are substantial, as highlighted by a US study<sup>21</sup> showing that depression was associated with a 253% increase in total medical costs for people with asthma (excluding mental health treatment costs).<sup>13</sup>

### ***Psychological therapy models to assist mood, self-management and behaviour change***

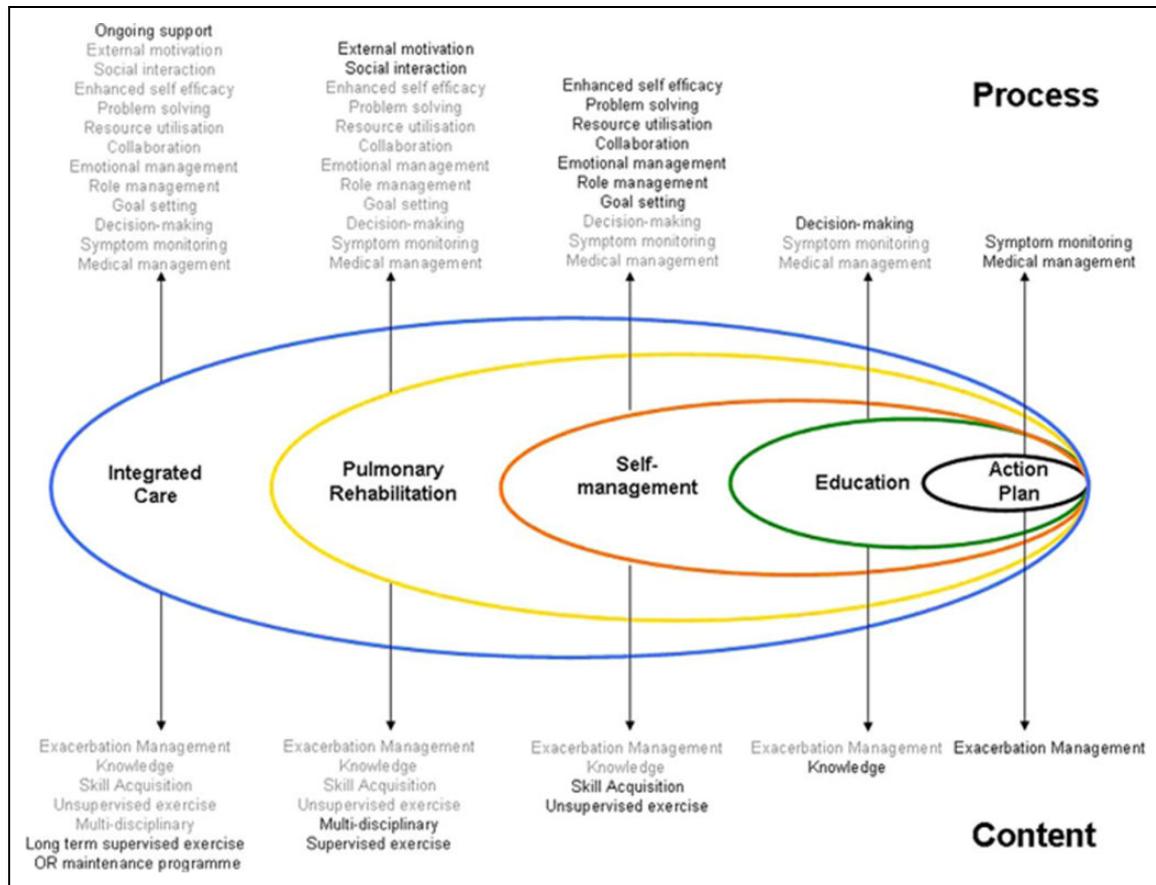
One of the key psychological therapy models used by practising psychologists when working with people with chronic medical problems is *cognitive-behaviour therapy* (CBT).<sup>22</sup> CBT focuses upon facilitating a change in an individual's interpretation of their experiences (to more realistic and helpful thinking patterns) in order to improve emotional well-being and to increase healthy behaviours.<sup>22</sup> A review of the literature identified a pool of studies that focused upon the evaluation of a uni-disciplinary psychological approach using CBT to reduce anxiety and depression for people with

respiratory conditions. Results were variable, with some studies identifying significant improvements (e.g. see the studies of Livermore et al.,<sup>9</sup> Yorke et al.<sup>23</sup> and Hynninen et al.<sup>24</sup>), some non-significant improvements<sup>25</sup> and others showing no change.<sup>26</sup> Furthermore, a 2015 international systematic review and meta-analysis of 20 studies concluded that CBT appeared to be effective for improving psychological outcomes for people with COPD and thus recommended the delivery of psychosocial intervention alongside the medical treatment pathway.<sup>27</sup>

A growing international evidence base supports more integrated collaboration between mental health and physical health professionals in order to maximize psychological and physical health benefits for patients with chronic lung disease (e.g. see the studies of Lasser et al.<sup>16</sup> and Howards et al.<sup>28</sup>). A systematic review of CBT for COPD patients with mild-to-moderate anxiety or depression identified two randomized controlled trials (RCTs) that supported the use of CBT in conjunction with exercise and education in reducing anxiety and depression among people with clinically stable and severe COPD.<sup>29</sup> A 2013 systematic review of 23 COPD studies<sup>30</sup> concluded that CBT and self-management interventions, when combined with exercise therapy, were effective in relieving dyspnea, emotional stress and fight-flight physiological and behavioural responses in people with moderate to severe COPD.

*Self-management* has been widely recognized as a core component in the clinical care of chronic illnesses.<sup>31</sup> Wagg<sup>32</sup> has constructed a diagram to show the different components of professional support for people with COPD that can be adapted in accordance with the severity of their chronic health needs (Figure 1). The author demonstrates a continuum of care with five components (action, education, self-management, PR and integrated care) whereby the most complex patients require an integrated care package that also contains within it the different elements of care provided to those with less severe health needs. As is shown, PR adopts all aspects of self-management with the additional focus on 'self-motivation' and 'social interaction' using multidisciplinary input and supervised exercise.

The psychologist has a key role in supporting self-management input, whether offered individually or within the context of PR. Effective psychological input encourages patients to acquire and apply a wide range of self-management skills that include gathering information, managing medication, managing symptoms, managing psychological consequences,



**Figure 1.** A spectrum of support for COPD (chronic obstructive pulmonary disease), as in the study of Wagg.<sup>32</sup>

adjusting lifestyle, using social support and communicating effectively.<sup>33</sup> The value of including a psychological component to maximize patient self-management proficiency was highlighted in a pilot study by Abell et al.<sup>34</sup> The psychologist joined a multidisciplinary led PR programme in order to address potential barriers to completion (such as low motivation, depression and anxiety) and to maximize participants' capacity for behaviour change. Results found a significant improvement in group completion rates which thus allowed patients to derive optimal functional benefits from the programme. The cost-effectiveness of this psychological input was demonstrated as PR completion was associated with a significantly lower mean annual hospital admission rate and lower bed day use in the year after PR. Additional evidence has concluded that the costs of including psychological initiatives within physical health management programmes are more than outweighed by the savings arising from improved physical health and reduced service use after these programmes.<sup>28</sup> Despite these findings, the inclusion of a psychologist on PR

programmes in England and Wales remains limited to date – with only 21% of 244 audited programmes using a clinical psychologist to facilitate selected group sessions.<sup>35</sup>

In addition to CBT, the use of other psychological approaches in self-management programmes for patients with COPD has recently been evaluated. *Motivational interviewing* (MI) is a patient-centred counselling style that seeks to help people resolve ambivalence about change and thereby increase motivation to change problematic behaviours.<sup>36</sup> Benzo et al.<sup>36</sup> evaluated a self-management intervention for people with moderate to severe COPD that included MI as a way of guiding patients towards behaviour change. Conclusions emphasized the impressive benefits of incorporating an MI approach as a way to improve patient engagement and commitment to self-management. Two recent systematic literature reviews have examined the effectiveness of MI for health behaviour change, for people with chronic health conditions<sup>37</sup> and non-clinical (general) populations recruited through primary care.<sup>38</sup> Both reviews

demonstrated some evidence for the efficacy of MI in facilitating health-related behaviour but concluded that there was an inconsistency across studies in adherence to basic MI principles (thus highlighting the need for further studies with stronger treatment fidelity).

*Mindfulness-based approaches* have been found to be of great value for people with a wide range of chronic health conditions by improving people's experience of physical symptoms and reducing emotional distress.<sup>39</sup> With its origins in Eastern philosophy and adapted for use in a health context, mindfulness aims to cultivate non-judgemental attention in the moment (through different meditation practices). An RCT by Pbert et al.<sup>40</sup> demonstrated that a mindfulness-based stress reduction programme for people with mild to severe persistent asthma produced significant improvements in asthma-related quality of life and stress at 12 month follow-up. In a qualitative pilot study of a mindfulness group programme for patients with severe COPD (weekly for 8 weeks then monthly for 1 year), Benzo<sup>41</sup> concluded that participants expressed a shift in values (such as greater self-compassion and appreciating life by seeing hardships as opportunities) that was central to facilitating motivation for self-management.

There is growing evidence for the effectiveness of *systemic therapy* to support adjustment to and management of chronic physical illness.<sup>42,43</sup> This approach provides a forum for exploring ways of coping with the health condition and its impact on interpersonal relationships, with meanings influenced by social and cultural context.<sup>44</sup> A widely used approach within systemic therapy is *narrative therapy*, which seeks to collaboratively generate and strengthen preferred self (and life) stories where the individual is seen as separate from the problem.<sup>45</sup> A meta-analysis of 52 RCTs for people with a range of chronic physical conditions found that systemic interventions led to significantly better physical health and mental health in patients (and in family members who attended systemic groups) compared with routine care.<sup>46</sup>

## **Illustration of a respiratory psychology service within a teaching hospital**

### *Shared targets and aspirations*

In this illustrated working model, the respiratory psychologist is embedded within the hospital team in order to provide integrated psychological input across

inpatient, outpatient and group settings. This service design was informed by the NHS and Social Care Long-Term Conditions Model<sup>47</sup> which uses the US Kaiser Triangle to demonstrate that a significant minority of individuals with more complex long-term health conditions require a more specialist integrated multidisciplinary approach. A key shared focus with the respiratory team has been to work creatively to support the goal of building patients' self-management skills in order to foster effective coping with their respiratory condition and maximize use of medical expertise and treatment. The importance of co-creating targets with patients in order to encourage 'ownership' of their success<sup>48</sup> mirrors the team's commitment to facilitating self-management and fits well with the emphasis upon protecting patient dignity and self-respect. The task of ensuring equitable psychology access for the 'hard to reach' patients has been a further team priority influencing many recent service initiatives, as described below.

### **Referral criteria**

The respiratory team refer adults who are experiencing significant levels of distress (due to their respiratory health or other reasons) and who are having difficulty living with their condition and/or managing it. In addition, people with heavy tobacco dependency are referred for support to quit smoking, when the complexity of their difficulties requires this input prior to, alongside and/or after their work with a quit smoking advisor (QSA). See Table 1 for a summary of the respiratory psychology referral criteria.

### **Key therapy themes**

While each piece of psychological work is uniquely tailored to the needs of the individual, there are some key therapy themes integral to working within a respiratory context. These themes are outlined as follows:

- (1) Initial meetings primarily focus on helping people to increase their *understanding of the nature and implications of their lung condition*. This involves mapping the physical and psychosocial impact of living with this condition in order to develop a shared formulation of the multiple factors that influence their illness experience. A biopsychosocial model<sup>49</sup> (Figure 2) is used by the

**Table 1.** Summary of respiratory psychology referral criteria.

## Reasons for referral to respiratory psychology:

If the patient experiences any one (or more) of the following...

- Frightening breathlessness leading to anxiety, panic attacks and frequent A & E attendances.
- Difficulty with adjustment to the medical diagnosis and/or ongoing impact of the lung condition (e.g. sense of loss and identity/relationship issues).
- Low mood, depression and bereavement (due to personal losses linked to the lung condition).
- Problems with the self-management of their lung condition, for example, struggling to follow medical guidance and/or treatment plans.
- Traumatic hospital experiences (including frightening episodes on ICU or initiation of NIV found to be distressing).
- Difficulty quitting smoking or accessing quit smoking input (e.g. for complex psychological reasons).
- Deterioration of close relationships due to worsening respiratory condition.
- Ambivalence about or reluctance to attend a PR rehabilitation programme.

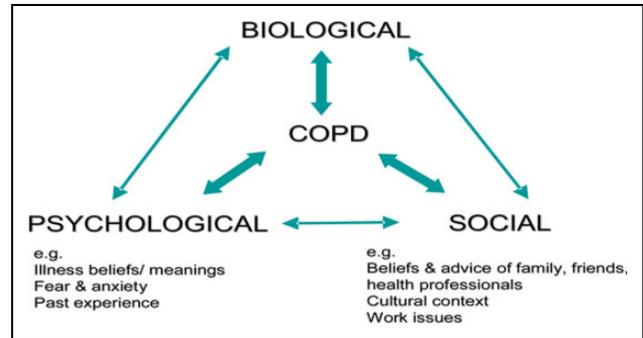
## Reasons to refer elsewhere:

- If the patient is (1) actively self-harming and/or at suicide risk; (2) showing signs of psychosis or mania → psychiatry input recommended (via the hospital liaison psychiatry team or through a GP referral).
- If patients' distress/difficulties are not linked to their lung condition → GP to refer to local psychology/counselling services.

PR: pulmonary; A&E: Accident and Emergency department; ICU: Intensive Care Unit; NIV: Non Invasive Ventilation; GP: General Practitioner.

psychologist to facilitate the individual's telling of their illness story.

- (2) An individual's *hopes for therapy* are elicited, making sure these are clearly distinguished from the goals of significant others (e.g. family, friends and referrer). Once people are clearer about their therapy goals, unrealistic expectations can be addressed and motivation to attend is strengthened. It is important to establish early on that this input is collaborative, with the patient bringing an expertise on themselves (e.g. their illness experience) that can be weaved by the psychologist into a joint enterprise towards change.<sup>50</sup>
- (3) The psychologist generally supports patients' *adaptation to their respiratory condition* by exploring ways to reduce the often wide-



**Figure 2.** A biopsychosocial model, as in the study of Engel<sup>49</sup>: adapted for COPD (chronic obstructive pulmonary disease). Reprinted with permission from AAAS.

ranging impact of their condition. In addition, any fears, concerns or misunderstandings about their health (and healthcare) can be identified and channels of communication set up to address these issues. For example, the patient may write a list of key points to discuss with the medical consultant or may prefer the psychologist to liaise directly with the team. Where relevant, the work can help maximize the use of medical input, for example, by identifying and addressing any barriers to following advice or treatment.<sup>51,52</sup>

- (4) An underlying theme within all therapy is the focus upon *building self-efficacy and coping ability*. While new strategies may be taught using a CBT approach (e.g. unrealistic thought challenging, relaxation),<sup>22</sup> narrative therapy prioritizes eliciting existing coping resources that 'previously worked' when faced with earlier life challenges.<sup>45</sup> The therapist listens throughout for moments of mastery and success (however small) and as long as the patient experiences these acts as achievements, ways to celebrate them are designed.<sup>53</sup> For example, some patients greatly value an 'achievements diary', while others may recruit a friend to feedback their successes to. The individual's therapy achievements can be detailed in the discharge letter to the referrer in order to facilitate future conversations on further progress (and/or new related challenges).
- (5) In addition to the above-mentioned themes, when an individual is referred for *quit smoking input* (or this is raised by the individual themselves as a focus for therapy), careful attention needs to be paid to the physical and

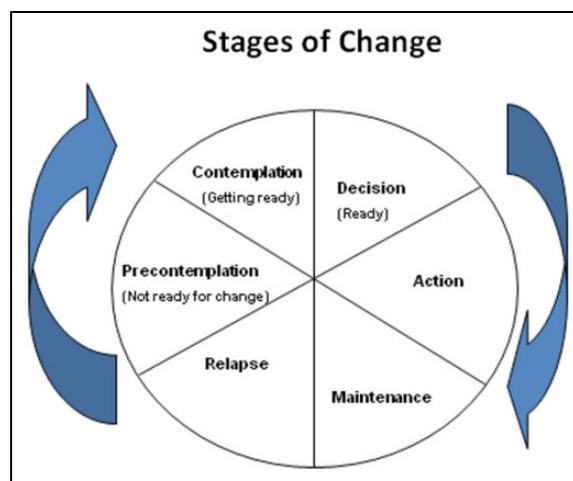
psychological challenges of tobacco dependency. This work may focus upon exploring and addressing any barriers to accessing a QSA such as an individual's limited confidence in their ability to succeed and/or low motivation to quit especially if smoking is seen as their key resource for managing stressor regulating emotion. Once an individual has begun work with a QSA, psychology input can complement this work by developing further strategies to identify and overcome obstacles and to consolidate and strengthen achievements.<sup>54</sup> In addition, the value of psychology input to aid relapse prevention was recently highlighted in a study<sup>55</sup> that focused upon COPD smokers with a heavy smoking history, multiple quit attempts and additional complex needs.

### Engagement

When working with people with physical health problems, the question 'Why do I need to see a psychologist?' frequently arises. Without proper explanation, many people understandably misinterpret a psychology referral as indicating that their health team 'think I'm mad', or regard their physical health symptoms as 'all in the mind' or largely psychosomatic. For many, especially older people, 'talking therapy' is not within their culture and some initially express the preference to stick with their lifelong approach and 'just get on with it'.<sup>44</sup> The 'stigma of psychology' can be a significant barrier in chronic health conditions, preventing access to much needed psychological input.<sup>10</sup>

In an attempt to maximize the likelihood of engagement with psychology, the referrer plays a key role in how they present and describe this treatment option. As well as clarifying what psychology input is (e.g. 'an opportunity to reduce the impact of your lung condition through expanding your coping resources') and what it isn't (e.g. 'this doesn't mean we think you're mad . . . or have failed in any way'), the referrer can normalize the referral (e.g. 'the psychologist is part of our respiratory team and meets with many people'). Inpatient ward visits can provide an effective way to demystify psychology and enable the psychologist to explain his/her role and tailor an explanation of psychology input around the specific needs and wishes of the individual.

A further consideration for both referrer and psychologist is that of the individual's 'readiness to



**Figure 3.** Stages of change model, as in the study of Prochaska and DiClemente.<sup>56</sup>

change'. The stages of change model<sup>56</sup> (Figure 3) provides a helpful way to conceptualize this 'readiness' whereby patients at the 'precontemplation' and 'contemplation' stages are harder to engage and less likely to attend their first appointment. Conversations eliciting any concerns about making changes as well as their hopes for the future can help strengthen an individual's readiness to change. Of course, the right to decline input must always be respected with the possibility that after some reflection they may reconsider.

### Involvement in Pulmonary Rehabilitation (PR)

The psychologist supports the integrated model of care for PR by providing psychological input to the hospital and community PR programmes in order to maximize patient engagement and to guide patients towards managing the psychological challenges of their condition. The psychologist works specifically to facilitate goal setting, explore the impact of breathlessness, enhance coping (i.e. with fear of breathlessness, anxiety and illness exacerbations) and maximize maintenance of improvements. The psychologist also meets group members individually to support optimum benefit from the programme including exploring and addressing any barriers to progress.

Drawing on a narrative therapy approach to complement ideas from CBT, the intentions of the psychologist extend beyond teaching an effective 'tool box' of self-management skills during the PR programme. Using the 'narrative' idea of 'spreading the news',<sup>57</sup> the task is also to facilitate the sharing of strategies between participants, enabling them to update their 'identity narrative' from that of passive

recipient to resourceful copier who has much to teach others. One method of passing on patients' unique skills and achievements has included the documentation of their ideas (in their own words) within the book, 'What the group did for me . . . new strategies, confidence and fun!: A book of contributions by those attending the . . . hospital pulmonary rehabilitation group . . . for those who want to know more'. The book is now available in local respiratory inpatient and outpatient settings, and feedback indicates that the unique insights into participants' experience have successfully influenced those who were previously ambivalent or reluctant to 'give the group a go'.

### Multi-disciplinary team work

The psychologist works closely with the respiratory team to support the more complex respiratory patients, providing clinical input both directly and indirectly. The psychologist provides consultation and advice on psychological issues linked to patient care, through individual case discussions, joint patient appointments and wider staff training (e.g. MI training). The psychologist also facilitates regular reflective practice sessions whereby the team use their own case material to work on MI skills and support each other facing the challenges of working with very sick patients, many of who die while under their care.<sup>58</sup> This expands the co-creating health initiative within the hospital by enabling practitioners to continue to build on their advanced development programme skills that promote integrating self-management support into routine care.<sup>59</sup> A further creative way of multidisciplinary working relates to service promotion, as illustrated by the psychologist's involvement in the production of an educational film about PR and long-term exercise alongside respiratory colleagues.<sup>60</sup>

### Conclusion

The availability of psychology input within a respiratory medicine healthcare system is a valuable (though still relatively underfunded<sup>35</sup>) health resource. This article aims to capture the diverse and multifaceted ways that a psychologist can complement the multiple skill mix needed by a respiratory team when faced with the complex needs and struggles of their patients. It is hoped that this article may provide an informative guide to service development for those who seek to expand the psychological aspects of their clinical care and to enhance their patients' holistic well-being and respiratory self-management.

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