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Occupational Therapy-Led Pulmonary Rehabilitation: A Practice Analysis

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Key Words

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Statement of context

Chronic Obstructive Pulmonary Disease (COPD) is a chronic lung condition which causes multiple symptoms affecting quality of life and is the third largest cause of mortality worldwide (Department of Health (DH), 2012). It is estimated that 1.2 million people are living with COPD in the UK, over 170 million people living with the condition worldwide, and there is general acceptance that these statistics will underestimate the prevalence of the condition due to undiagnosed and mis-diagnosed cases, and issues with definitions and classifications (British Lung Foundation (BLF), 2017; Adeloye et al, 2015).

COPD is an incurable condition with significant personal and economic costs. It is estimated that lung disease costs the UK over £11 billion each year in costs to the NHS, social care and in lost productivity (BLF, 2017). Whilst technological advances, alongside public health drivers, are influencing mortality and morbidity rates for other major groups of health conditions (for example cardiovascular conditions and cancers), COPD is the only major cause of death that is increasing (BLF, 2017). The prevalence amongst the population, alongside the burden and cost at individual and societal levels, means understanding ways to manage this condition is a clear priority.

Pulmonary Rehabilitation (PR) is defined as a "comprehensive intervention based on a thorough patient assessment followed by patient tailored therapies that include, but are not limited to, exercise training, education, and behaviour change, designed to improve the physical and psychological condition of people with chronic respiratory disease and to promote the long-term adherence to health-enhancing behaviours" (Spruit et al, 2013). There is well-established evidence

that PR improves health-related quality of life for people with COPD and it is therefore accepted as an essential strategy for people living with this condition (Global Initiative for Chronic Obstructive Lung Disease (GOLD), 2017; McCarthy et al, 2015). However, whist general efficacy is accepted, it is still unclear what components of PR lead to the best outcomes for patients, which includes uncertainty over length, frequency, location and professional involvement (McCarthy et al, 2015).

Critical Reflection on Practice

This practice analysis reflects on the development of an occupational therapy-led model of PR within the North East of England. The model was first trialled for one year as part of a pilot project with one identified GP practice and following successful evaluation, was recommissioned on an ongoing basis and is now delivered across three locality areas. Key features of the programme include: it is led, and primarily facilitated, by occupational therapists; it is delivered mainly in community leisure facilities; it adopts a cohort model where individuals start and finish together for the 6-week programme and; it utilises existing local authority services and personnel to deliver the exercise component of the programme.

Despite a lack of evidence to support specific models of service delivery, physiotherapy-led PR services have emerged as more common (Yohannes & Connelly, 2004) and reviews of published research yield very few studies which specifically mention occupational therapy (Walker et al, 2016). One likely explanation is linked to the centrality of exercise and strengthening as a key element of PR programmes and a central domain of concern for physiotherapists, yet there is limited evidence which supports this as the central focus, or supports the optimum composition of teams. In order to further understanding of the contribution of occupational therapy in this area, this analysis highlights some of the key features of the occupational-therapy led programme, alongside a reflective discussion of how these elements have been developed in line with the core values and philosophy of occupational therapy.

The Occupation-Focussed Initial Assessment

As part of this occupational therapy-led PR programme, the initial assessment is conducted in the person's own home and includes standardised and non-standardised elements. The British Thoracic Society Quality Standards for Pulmonary Rehabilitation in Adults (2014) outline that outcomes of treatment should measure, as a minimum, exercise capacity, dysponea and health status and therefore this service includes completion of the COPD Assessment Test (Jones et al, 2009) and the 6 minute walk test at the point of initial assessment.

Whilst such standardised asssessments assist to meet standards and establish a baseline, the occupational therapy team critically considered that this could promote an initial emphasis on symptoms and disease progression. Therefore, they deliberately also included the Well-being Star (adapted from the Outcomes Star originally developed by Triangle Consulting (Harper, 2004)), and the Hospital Anxiety and Depression (HAD) Scale (Zigmond & Snaith, 1983) in order to more fully understand and measure the biopsychosocial impact of living with lung disease. And whilst recognising a pragmatic need for valid and reliable outcome measurement, the non-standardised

initial interview is of equal importance, placing emphasis on a collaborative process to understand a narrative in relation to the person's medical, social and occupational history and facilitating a goal-setting process to help the individual identify what they want to achieve in terms of their own daily activities. At this stage, rather than discussing changes in symptoms or features of the disease (for example a common starting point is 'I want to feel less breathless' or 'I want to be less anxious'), people are encouraged to re-frame and verbalise what they want to change or adjust to in daily life (for example, 'I want to be able to wash and polish my car without needing to stop'). Such goals are revisited regularly within group PR sessions and are integral to the programme as a whole.

Although initial assessments are described as an established part of occupational therapy practice across settings (Pentland et al, 2018), the refinement of this assessment process to balance sensitive outcome measurement with a person-centred collaborative process has been an important and deliberate feature and emphasises an alignment with the philosophy of occupational therapy from the outset. Emphasis is given to wellbeing (a concept acknowledged as a state of *being* and *doing*), co-constructing how individuals subjectively interpret their own wellbeing through a narrative, and focussing on person- and occupation-centred goals (Fieldhouse & Bannigan, 2014; Royal College of Occupational Therapists (RCOT), 2015a). Whilst carrying this out in a person's home may feel obvious and intuitive for occupational therapists, situating conversations about occupations within the context in which they occur is another element of deliberate and reflective reasoning.

Flexible and Responsive Patient Education

Often PR programmes follow directive models, with pre-determined and professionally-led educational topics or activities delivered in a set order. Yet recent evidence suggests this may undermine people's confidence to self-manage long-term health conditions and instead, positive outcomes may be achieved through personalised and tailored approaches, focussing on conversations with health professionals to discuss goals, actions and identify the elements people require support to manage (Coulter et al, 2015).

Self-determination, that is the right of a person to make independent decisions in the process of receiving care, is again emphasised as an important feature of a rehabilitative process (Ekelund, Dahlin-Ivanoff & Eklund, 2013). In line with this, rather than a 'one-size-fits-all', pre-determined programme, this PR model encourages group members to identify the elements of their health and wellbeing where they would value professional support. For pragmatic reasons, some professionally-led sessions are pre-booked, but others involve group choice. And for all sessions, including those with pre-booked facilitators such as a dietician or respiratory nurse, the education session starts with a group discussion about what they want to know, how this particular topic will help them to manage their own health and wellbeing and involves peer discussion to encourage the group to share support strategies linked to the topic. Choice within group activities has been supported as a strategy to foster feelings of competency and self-efficacy (Bandura, 1999). Concepts of self-determination and choice can be clearly linked to humanistic perspectives which informed the early development of the occupational therapy profession (Creek, 2014) and which continue to be reflected throughout professional standards and codes of conduct (RCOT, 2015b).

An Enabling Environment for Participation in Occupation

The programme takes place in local gym and community facilities, with groups of people who have self-selected this location and participate in the full 6-week programme together. Not only is this seen as an authentic social and physical environment for the activity of attending the weekly PR session, but it is also potentially an authentic environment for past, current or future occupations. The link to sustainable occupational change is important here and anecdotal feedback suggests many people continue to engage in social activities, or use the same facilities after completion of the formal programme.

The environment in which occupation takes place is understood as a crucial enabler or barrier to optimising performance and engagement and is reflected in models of professional practice (Polatjko, Townsend & Craik, 2007). The design of human and non-human conditions within the environment is linked to the core occupational therapy skill of activity and occupational analysis although the challenge is that a simplified common-sense approach is assumed, when in reality, facilitating environmental conditions to promote engagement in occupation is often complex, non-standardised and difficult to describe (Cole, 2018).

Case Study

James* is a 71 year old man who was recently widowed and has a diagnosis of COPD. James had a stroke 4 years ago which resulted in a left sided weakness and poor balance. He was referred to PR by his Consultant Physician although initially declined to participate, feeling hopeless about anything which required him to go out or do something new.

After a second approach, he consented to the initial assessment and James later acknowledged if he had been required to go out for this initial appointment he would not have gone. Baseline standardised assessments were completed although it was during discussions that he shared feelings of isolation, low mood, anger about his situation and that he was using alcohol heavily to cope. James was asked about his goals at this stage and he could not identify anything he thought he could change. However, James did share that the experience of the initial assessment was a positive one and that sharing his situation with someone who was willing to listen was helpful in itself. Despite James struggling to identify goals related to his everyday life, the occupational therapist shared examples of things she had heard him talk about that had previously held meaning to him and how doing these things again could be goals in the future.

James therefore agreed to start to attend a group programme, choosing a venue already known to him and valuing that the location meant he could stop and go home if he wanted to. At an early stage his occupational therapist was discussing with him how the new occupation of attending the group linked to familiar environments and routines. In early groups, James needed a lot of support to engage in the exercises and, with the occupational therapist mindful of building feelings of self-efficacy, she worked closely with the exercise instructor to grade and adapt the activities and the environment taking in to consideration his left sided weakness, balance and his breathlessness. Socially, he did not say much in the group but discussed later that seeing others making decisions and setting their own goals was a turning point in helping him to see his own situation more

positively. He began to set his own goals within the group, the first of which simply focussed on walking to the gym on his own.

On completion of the programme, repeat standardised assessments evidenced improvements in his activity tolerance and his mood, a reduction in how his COPD was impacting on his overall health and he had also stopped smoking and drinking. He has continued to go to the same gym, attending classes with the same exercise instructor and with the same group. He also bought home exercise equipment to enable him to continue to maintain his positive lifestyle changes.

Implications for Practice

A synthesis of the features above reveals that rather than being a discreet, or one-off focus on occupation (for example, through a one-off session facilitated by an occupational therapist), occupation is the central feature of this service, underpinned by core knowledge, values and skills of occupational therapy. Reflected in an earlier section, the centrality of exercise and strengthening as a key element of PR programmes has commonly placed physiotherapists in leading roles within PR services, yet conversely it is the centrality of occupation which has strengthened this specific model and resulted in the occupational therapy-led PR programme becoming an established part of the commissioned service provision.

Some of the strengths of this service lie in often taken for granted aspects of occupational therapy practice such as an initial assessment in a person's home; a familiar and accessible location for a group; and a collaborative goal-setting process valuing activities which hold personal meaning. It is hoped such reminders will provide important messages for those involved in delivering or developing occupational therapy services within PR. This is particularly pertinent when services may be encouraged to manage costs – for example, by facilitating initial assessments within a maximum time (and therefore perhaps prioritising the standardised elements by default), or undertaking assessments and interventions within clinic environments.

However, this synthesis has also revealed some crucial challenges. Firstly, as a profession, occupational therapists struggle to articulate why they are centrally, and perhaps uniquely placed to lead the elements of practice outlined in this analysis. Many professionals have expertise in delivering and facilitating group interventions, and terms such as 'choice', 'person-centredness' and 'collaboration' are now part of a more generic discourse. It is not sufficient to use such terms and rely on implicit links to core skills and professional reasoning of occupational therapy but instead occupational therapists must develop vocabulary, grown from a strong theoretical foundation, to describe their contribution.

Furthermore, difficulty describing practice– such as initial assessments, goal-setting processes and self-management approaches – can result in these elements becoming varied, non-standardised and difficult to replicate. Whilst this does support flexible and individualised services, it also leads to challenges when delivering a programme across different therapists and locations and difficulty with meaningful evaluation or claims about effectiveness.

Noticing such challenges has been an important area of development, and has highlighted future actions for service and professional development and exciting opportunities for research. Looking

ahead, the team are keen to evaluate and compare this PR model through experimental research and recognise it is this which will help to answer important clinical questions about which models and components are most effective. However, research to describe and optimise current service provision (so it can be subsequently implemented and replicated consistently) is a necessary developmental stage before trying to evaluate the effectiveness of a complex intervention (Craig et al, 2008). Qualitative research is therefore planned within this service in order to describe the programme from the perspective of service users and stakeholders and to gain consensus about the best-practice features.

Key Messages

Occupation can be the central tenet of a pulmonary rehabilitation programme with occupational therapists ideally placed to lead and develop services.

However, occupational therapists must clearly articulate the unique knowledge and skills informing occupation-focussed pulmonary rehabilitation programmes in order to inform commissioning of services and to create conditions for robust evaluation and research.

Research Ethics

Ethics approval was not required nor sought for this practice analysis. The case study above* is based on a hypothetical case with no identifiable information.

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