Exploring patients’ appraisals to facilitate post-exacerbation Pulmonary Rehabilitation

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“I have no conflict of interest”
Session outline

• Background.
• Issues surrounding adherence to Pulmonary Rehabilitation (PR).
• The role of patients’ illness perceptions in promoting PR.
• A cluster analysis of illness perceptions data - targeting and tailoring therapy.
• A qualitative methodology - how patients who decline PR appraise acute exacerbations (AEs).
• PR is recommended for all patients with chronic respiratory disease.
• Post-exacerbation PR shows promise in reducing readmission rates.
  - Reduces mortality
  - Enhances health status
  - Increases exercise capacity
• Combination of endurance and strength training.
• 6 - 8 weeks, 3 x week:
  – 2 sessions supervised.
• Self-monitor exercise at home.
• Sessions last 2 hours:
  – 1 hour exercise
  – 1 hour disease education
• Education is delivered by a multi-disciplinary team.
Adherence to PR programmes

- Approximately 20-60% of those eligible and with stable COPD do not complete PR programmes (Fischer et al., 2009; Garrod et al., 2006; Hogg et al., 2012; Selzler et al., 2012; Hayton et al., 2012).

- Only 9.6% of patients attend post-exacerbation PR (Jones et al., 2014).
  - Low number of referrals: 32% of all eligible.

RESEARCH LETTER

Pulmonary rehabilitation following hospitalisation for acute exacerbation of COPD: referrals, uptake and adherence
Referral offered to PR

- 332 Screened
  - 111 Excluded
  - 93 Refused
  - 128 Recruited

- 71 Accepted referral
  - 39 Attended initial assessment for PR
    - 29 Accepted PR
    - 10 Refused PR
    - 6 Still enrolled
    - 11 Completed
    - 32 DNA or cancelled initial assessment for PR
    - 12 Dropped out
  - 57 Refused referral
Reasons for not attending an initial assessment

- Too ill
- Not understanding
- Co-morbidities
- Readmitted
- Too much
- Missed referral
- Got better
- Posponed
- Cant be bothered
- Hospital environment
- RIP
- Weather
- Unable to contact
- Holiday
- Time issues

Number of patients
• Sociodemographic data and clinical variables have been unsuccessful in explaining the variance in patient drop-out rates.

• Psychological variables may be more useful (Fan et al., 2008; Garrod et al., 2006; Selzler et al., 2012; Hogg et al., 2012; Fischer et al., 2009).

Barriers to pulmonary rehabilitation: Characteristics that predict patient attendance and adherence

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Illness perceptions and health promoting behaviour

- A high sense of **personal and treatment control** and viewing **illness to be serious** is associated with adherence to health promoting behaviour (Alsen et al., 2010; Skinner et al., 2011).

- 20% more patients attended cardiac rehabilitation following an intervention to shape illness perceptions (Petrie et al, 2002).

- Patients’ illness perceptions may have a role in the successful completion of PR.
Illness Perceptions Questionnaire-Revised (IPQ-R)

Identity - Symptoms associated with the disease.
Timeline:  Chronic - Duration of disease.
          Cyclical - Stability of disease.
Consequences - Illness severity and how it impacts on physical, social and psychological functioning.
Control:  Personal - Extent to which patients feel in control of their disease.
          Treatment - Efficacy of treatment.
Illness coherence - Understanding/comprehension.
Emotional representation - Affective response to disease.
Explore illness perceptions in a population of patients following hospitalisation for an AE COPD to allow for the identification of clusters according to a psychological profile.

It is hoped that this research can inform the development of targeted interventions designed to promote attendance to PR.
• 128 patients were recruited.

• Inclusion criteria:
  – Patients 10 (+/- 3) days post discharge from hospital following an admission with an AE COPD.

• Exclusion criteria:
  – Completed PR in the previous 12m.
  – Physical and/or psychosocial co-morbidities excluding them from PR.
Methods – data collection (1)

• Patient demographics: Length of diagnosis and disease severity.

• IPQ-R

• The Hospital Anxiety and Depression Scale (HADS).

• The Chronic Respiratory Questionnaire-Self Reported (CRQ-SR).

• The Pulmonary Rehabilitation Adapted Index of Self-Efficacy (PRAISE).

• Physical activity: Energy Expenditure and step count (SenseWear Pro² activity monitor).
6 month follow up

- Hospital admission data: all cause, respiratory and non-respiratory.
- Uptake, attendance and completion of a PR programme.
• Cluster analysis using the 8 domains of the IPQ-R.
  – Two-step approach: hierarchical cluster analysis using Ward’s method followed by a K-means cluster analysis (Clatworthy et al., 2007).
• Between cluster differences
  – ANOVA and Independent t-test
  – Chi-squared/Kruskal-Wallis and a Mann Whitney U test
Conclusions

• Three meaningful psychological profiles are likely to exist in a population of patients following an AE COPD:
  – 1. ‘in control’,
  – 2. ‘disengaged’
  – 3. ‘distressed’.

• Emotional representations play a key role in defining clusters in patients with COPD following an AE.
• To explore how patients who refuse referral to PR appraise AE COPD, in the context of having considered and declined PR.
Methods - sample

- 6 patients.
- All had refused a referral to post-exacerbation PR made at discharge from hospital.
- Exclusion criteria:
  - Refused a referral to PR only because they had done it previously.
  - Previously completed a PR programme.
  - Not deemed appropriate for PR due to physical and/or psychosocial co-morbidities.
Interview schedule was informed by a systematic review and patient/public group members.

In-depth interviews 1 month (+/- 1 week) following hospital discharge.

In patients own homes.

45-75 minutes.

Patient led.
• Interpretative Phenomenological Analysis (IPA)
  – Aims to understand lived experiences in response to specific events.
  – Analysis examines how an event is experienced and ascribed ‘meaning’.

• 3 researchers, 2 patients with COPD and members of a multi-disciplinary team were involved in data analysis.
Findings (1)

**Construction of the self**

**Guilt**

“I get cross with myself, because I think well it’s my own fault, if I’d never have smoked”

**Fear of others’ censure**

“I think sometimes the doctors can be very abrupt with you… oh perhaps they haven’t got much patience with me because it’s self-inflicted, I don’t know”

**Self-worth**

“I shouldn’t be here because look at these people, bottles on and things up their noses and I’m sitting here, I’m breathing, feeling normal, so I shouldn’t be here”
Findings (2)

Relinquishing control over disease

Intermittent nature of COPD

“Breathing wasn’t as good as, well worse than normal, I got more breathless going up stairs, more breathless when I moved about and I just thought well this is it, this is how it is”

Resistance to help-seeking

“Talk about feeling dirty and that when you have to go to the hospital”
Engagement with others

Dismissal
“they want the beds for other people, but that’s the way things are nowadays”

Efficacy of PR
“being active is not a problem at my own pace”
Conclusions

• Patients revealed self-conscious cognitions.
• Patients conveyed a diminished sense of self-worth.
• Patients normalised their condition.
• Patients were reluctant to relinquish control by handing disease management over to others.
Clinical Implications

- Routine assessment of patients psychological status maybe warranted – brief IPQ.
- Important to target and tailor treatment according to the needs of the patients.
- Actively involve patients in their treatment.
- HCPs need to show empathy and compassion.
- Encourage patients to be compassionate towards themselves.
Future interventions

• Motivational interviewing
• Mindfulness

(Benzo 2013)
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Thank you for listening.

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References


