

Top tips on designing your poster

Aspiring and Inspiring Respiratory Researchers
Programme, PCRS-UK Conference
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**Acknowledgement:
Dr Rupert Jones, for providing
the original slides**



First steps

- Read the conference instructions
- Check the display boards - get right size
- Think about printing / transporting
- Make it visually exciting
- Take home messages
 - Clear statement of main message(s)
 - A4 copies for handouts
 - Include contact details



Get the message over

- Highlight main message - eg TITLE
- Use graphs, tables and images sparingly
- Do the conclusions **big**
- Make references tiny
- Do try not to use too many words; they become very difficult to read, but sometimes can be useful for the occasional anoraks who have an interest in what you are doing. Large blocks of text tend not to be read - use captions and bullet points

Design

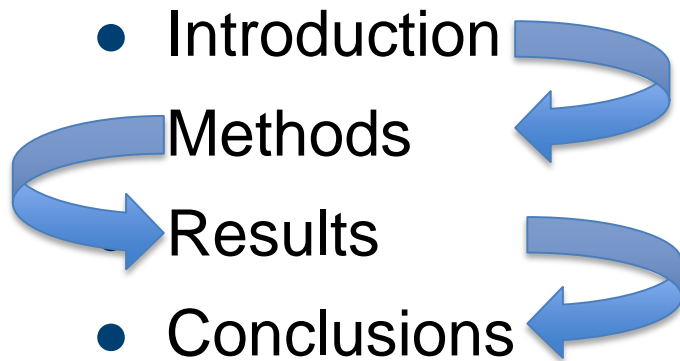


- Font: Make it big enough to read
- Colouring – consider, to give a distinctive ‘brand’ image
- Use contrasting colours where possible
- AVOID USE OF CAPITALS - THEY ARE MORE DIFFICULT TO READ

Title or main message as visual hook

Navigation

- The poster should flow



- Use radical designs if that helps

Determinants of Quality of Life in Patients with COPD in Primary Care

Rupert Jones¹, Xu Wang¹, Janet Comyn¹, Bryanie Shackell¹, Michael Hyland²

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2. Department of Psychology, University of Plymouth, Drake Circus, Plymouth. PL4 8AA

Background

Clinically, disease severity in COPD is often defined by spirometry.

However the impact of the disease on patients is better determined by quality of life (QoL) measures (CCQ Total score).

Aim

To examine which factors contribute independently to QoL.

Methods

242 patients with COPD were assessed in primary care:-
 (50% mild, 41% moderate, 9% severe).

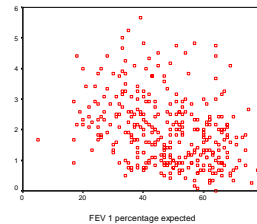
Dataset variables

Age	A&E attendances
Gender	Current smoking status
BMI	Pack years
FEV1% expected	Vaccination status
Airflow obstruction grade	Clinical COPD questionnaire (CCQ)
Exacerbations	Lung Information
Oral steroids courses	Needs Questionnaire (LINQ)
Bed days	MRC Dyspnoea scale score
Out of hours visits	

Results

Correlations

FEV₁ shows poor correlation with total CCQ score.



Pearson's correlations against 'Total CCQ Score'	Correlation Coefficient
MRC Dyspnoea scale score	.650(**)
Oral steroid courses in last year	.339(**)
Exacerbations in last year	.298(**)
Out of hours visits in last year	.286(**)
Current smoking status of patients	.259(**)
Pack years	.156(*)
FEV1 % expected	-.146(*)

Conclusion

The main determinants of quality of life in COPD patients in primary care are:

- MRC Dyspnoea scale score
- Airflow obstruction
- Smoking status
- Exacerbations

Multiple regression

Multiple regression analysis showed that the independent variables explained 17% of the variance.

The following betas (significance level) were obtained for the independent variables:

Airflow obstruction: 0.17 (p = 0.01)

Exacerbations 0.29 (p = 0.000)

Current smoker status 0.21 (p = 0.004)

Pack years 0.05 (p = 0.67)

Age 0.004 (p = 0.06)

A Qualitative Study of Sleep Experiences in Subjects with Moderate to Severe Chronic Obstructive Pulmonary Disease (COPD)

BS Shackell*, RCM Jones*, JL Campbell*, G Harding*, S Pearce**.

*Dept of Primary Care, Peninsula Medical School, Devon, England. **Chest Clinic, Derriford Hospital, Plymouth, Devon.

INTRODUCTION

Sleep disturbances are common in COPD and poor sleep impacts on quality of life. Fatigue is a prominent symptom associated with anxiety, depression, panic and daytime inactivity, and leads to reduced physical fitness, de-motivation and a decline in physical condition.¹ This study investigated the patients' perspective and the need for an appropriate intervention.

METHODS

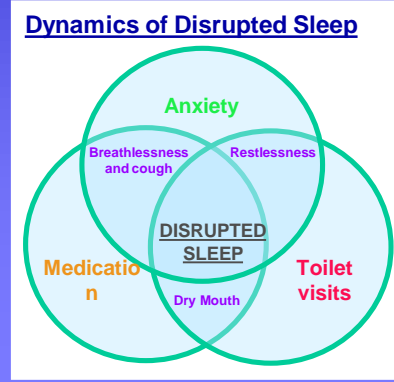
- Six females and four males with moderate to severe COPD (FEV₁<50% predicted) were recruited by a Respiratory Specialist Nurse.
- Semi-structured qualitative interviews were analysed by mapping key concepts and extracting emergent themes.
- The Chronic Respiratory Disease Questionnaire (CRDQ), Hospital Anxiety and Depression Scale (HADS), Pittsburgh Sleep Quality Index (PSQI), and Epworth Sleepiness Scale (ESS) were completed to obtain contextual data.

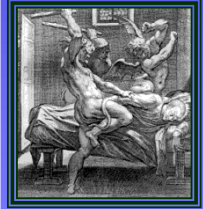
CONTEXTUAL DATA

Six patients reported poor sleep and four reported good sleep (PSQI). Patients reported a variety of sleep problems which were often worse during an infection. Compared to good sleepers, poor sleepers scored higher for daytime sleepiness (ESS), and anxiety and depression (HADS). Quality of life, fatigue, dyspnoea, emotion and mastery were also worse for poor sleepers (CRDQ).


EMERGENT THEMES

- ### Nocturnal fear and anxiety
- Fear of breathlessness and panic
 - Heightened anxieties
 - Isolated, poor support
 - Feelings of vulnerability
 - Lack of distractions
 - Daytime coping mechanisms are ineffective
 - Restlessness
 - Insomnia



- ### Barriers to effective sleep strategies
- Established disruptive habits
 - Demotivation and apathy
 - Poor expectations
 - Lack of information
 - Fatalistic attitude
 - Medical nihilism
- 

PATIENT EXPERIENCES



"I mean I don't complain about lack of sleep, I can cope with it I suppose" (PT6:M:76y)

"I don't enjoy drinking any more, but I find that it does relax me. It does turn around and give me that nice sleep where I'm alright" (PT9:M:51y)

"If I've taken the steroids for any length of time... I do wake up in the night and can't get back to sleep" (PT2:F:72y)

"During the night you're left with that one thought all the time, you know, about your breathing" (PT1:M:71y)

"I think a lot of it as well, is 'am I gonna see the next morning?'" (PT8:F:54y)

"As soon as I start of try to get comfortable, your mind starts to wander, you-you get a little bit chesty" (PT5:M:64y)

"I do drink a lot during the day, and I suppose that's why I've got to go at night" (PT8:F:54y)

"Well when I mentioned it to Dr, he just said try and relax a bit more. How can you relax if you can't sleep?" (PT3: F: 65y)

CONCLUSIONS

- Patients with moderate to severe COPD report sleep problems.
- Reasons for poor sleep are complex but may involve heightened anxiety, poor expectations, depression, medication effects, ineffective coping strategies and poor sleep hygiene behaviours.
- Some patients do not seek help. Those that do report poor support, information and treatment.
- Poor sleep quality is associated with poor health status.
- Holistic management of COPD should incorporate exploration of and support for sleep problems.
- The potential for an intervention to improve sleep and quality of life for COPD patients warrants further investigation.

Reference: ¹Kimoff RJ, and Riches K., 1999. Sleep and COPD. In Bourbeau J. Comprehensive Management of COPD. Hamilton, BC Decker Inc. 1999. pp. 259-271.

Patient-Centred, IT-Based COPD Audit

Jones RCM, Shackell BS, Comyn JW and Russell R.
RESPIRATORY RESEARCH UNIT, PENINSULA MEDICAL SCHOOL, PLYMOUTH, DEVON.

PROBLEMS

PATIENT

- Inadequate diagnosis and prevention strategies
- Lacks fundamental knowledge
- Afraid of dying
- Guilty about disease

GP

- Struggling with other priorities
- Assessment focuses on process rather than Patient Centred Outcome

PRACTICE NURSE

- Lack of spirometry training
- Problems interpreting spirometry

HOSPITAL

- Bed crises
- Unnecessary admissions of COPD patients to hospital

PATIENTS SUFFERING

COPD CRISIS!

NHS COSTS EXPLODING

MORTALITY INCREASING

WINTER BED CRISES

SOLUTION

Visiting expert nurse performs spirometry and clinical assessment

DATA

REPORT

GP report with clinical assessment & NICE guideline based management advice

Patient completes health status questionnaires on laptop. Information needs are assessed.

DATA

REPORT

Patient report with Self Management Plan. Information needs advice on required treatment changes.



OUTCOMES

PATIENT EMPOWERED

- ✓ Information needs addressed
- ✓ Self Management promoted
- ✓ Gains better understanding of disease and treatment

GP REPORT

- ✓ Patient assessed by expert professional
- ✓ GP Advised according to NICE Guidelines

PRACTICE NURSES EDUCATED

- ✓ Trained in Spirometry
- ✓ Improved disease management

SECONDARY CARE

- ✓ Potential for reduced hospital admissions
- ✓ Improved information exchange between Primary and Secondary Care

COPD Audit Data has been collected from 129 patients in 4 Practices in Plymouth tPCT. In the 94 confirmed cases: 47% had mild COPD, 41% moderate and 11% severe, according to NICE Guidelines.

24% had had >1 exacerbation in the past 12 months. 88% were up to date with influenza vaccinations and 46% with pneumonia vaccinations. 47% of patients had been X-rayed in the past 2 years.

This audit demonstrates that there are major problems in existing COPD care which can be resolved using this IT based system, with advantages to patients, primary care and the NHS generally.



The prevalence of posttraumatic stress disorder in patients with chronic obstructive pulmonary disease undergoing pulmonary rehabilitation.

Rupert Jones¹, Sam Harding¹, Man Cheung Chung², John Campbell¹.

¹Primary Care, Peninsula Medical School, ²University of Plymouth

Research questions:

1. What is the prevalence of PTSD in patients with COPD undergoing pulmonary rehabilitation (PR)?
2. Do PTSD symptom scores falls after PR?



Results:

Participants

100 subjects took part, mean age 68yrs (8.2); 65 (65%) male; 17 (17%) current smokers; mean 45 pack years. 70 (70%) completed rehabilitation.

PTSD

The prevalence of PTSD was 8%; Those with PTSD had worse health status: mean CRQ total scores: 76 v 60; $p=0.02$ mean HADS anxiety scores: 11.8 v 7.2; $p=0.01$

Rehabilitation

Completion of PR was associated with improved exercise capacity, quality of life (all CRQ scales and anxiety and depression) significantly in this cohort of 100 patients. However there was no change in PTSD symptom severity.

Background

PTSD is a common, serious condition, which is often undetected. It is treatable.¹

Main features: hyperarousal, avoidance behaviour and re-experiencing after a traumatic experience.²

Little is known about the prevalence in chronic diseases such as COPD and the impact of PTSD on the symptoms and disability.

Methods:

Participants: Patients with COPD referred to PR programmes in Plymouth, Exeter and East Devon.

Outcome measures:

- The Posttraumatic Diagnostic Scale
- Revised Impact of Events scale
- SF 12

Normal PR outcomes also recorded:

- The incremental shuttle walking test
- Hospital Anxiety and Depression score (HADS)
- Chronic Respiratory Questionnaire (CRQ)



Conclusion

PTSD was present in a small minority of COPD patients referred to PR and is associated with poor health status.

There is no evidence that PTSD symptoms fall after rehabilitation, despite its positive effects on HAD scores, exercise and health status.

And finally

- Check against abstract
- Check with other authors
- Be there at the right times
- Bring it home and display with pride!

