

Curating audio-visual self-management digital resources for people with Chronic Obstructive Pulmonary Disease (COPD): A novel process report

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Introduction

Self-management of symptoms and improving physical activity is beneficial in living well with COPD¹. People increasingly access online information to manage conditions. Locating evidence-based self-management information from reliable sources may be difficult for people with COPD². This poster describes the process of searching and curating audio-visual self-management resources of breathlessness management and safely increasing physical activity, into a Health Care Professional (HCP) endorsed digital magazine for people with COPD.

Methods

Search Strategy: A novel targeted search strategy was created by the project steering committee (a multidisciplinary European team of an ELF patient representative, experienced HCPs, and researchers). Search terms associated with breathing exercises and physical activity were generated by group discussion. Terms were searched on YouTube, Google Video, Vimeo, Odyssey, and patient support organisations to target lay person content and completed in 'private browser' mode to avoid replication by website search algorithms. Individual terms were searched in turn as video hosting websites do use Boolean operators. A digital magazine format was decided on to provide a resource that needed only basic digital literacy and was familiar to the target audience (i.e., accessing a website on any device and older adults reading a magazine).

Resource selection: A sample of 6 results for each search topic was provided to the steering committee and scored out of 5 for; 1) clinical message - clarity of information and correct evidence-based technique/advice 2) resource quality - visual resolution and audio intelligibility, and 3) personal appeal - appeal to people with COPD. Highest scoring resources were used to inform discussion for resources selected for the digital magazine and further search strategy refinement.

Results

Table 1 indicates the topics included and figures 1 and 2 show examples of magazine content. Mean video scores ranged from 3.9/5 to 2.8/5 (Table 2). Scores indicate that overall video quality was limited across all categories with the personability/reliability category tending to score lowest. Written comments provided during scoring indicate this was due to demonstration of techniques by health care professionals rather than people living with COPD, negative images of people with COPD, videos educating health care professionals and by the use of clinical settings over real world settings (figure 3). Gaps in the availability for some topics were also found.

Table 1. Summary of included content

Breathing Techniques	General advice for living day to day with COPD Diaphragmatic breathing/Pranayama breathing Pursed lip breathing Using a handheld fan for breathlessness Breathing in a rectangle Postural drainage Active cycle of breathing technique Huff cough Positioning to relieve breathlessness
Physical activity resources	Range of movement exercises Using the BORG scale to gauge effort and safe levels of breathlessness Overcoming barriers to physical activity Walking indoors program Indoor aerobic and resistance exercise program Physical activity diary Advice on increasing daily activity throughout the day Sports gallery of adapted sports for inspiration Dance for breathlessness Yoga, T'ai Chi and Qigong for people with COPD Exercising safely
General advice	General advice for living day to day with COPD Planning, pacing and prioritising Fatigue management and energy conservation Singing for breathlessness Harmonica playing for breathlessness Managing medicines in relation to breathlessness and physical activity



Figure 3. Examples of written comments provided alongside steering group video scoring

Figure 1. Digital magazine front page. Read the magazine at <https://www.ipcrgrg.org/copdmagazine>

Table 2. Mean steering group scores (SD) out of five by category for each topic

Category	Clinical Message	Video Quality	Personability / Reliability	Overall Score
Dancing for COPD	3.63 ± 0.95	4.17 ± 0.63	3.83 ± 0.93	3.9 ± 0.79
'More sports'	3.46 ± 0.72	3.88 ± 0.51	3.75 ± 0.38	3.68 ± 0.53
Position for breathing	3.69 ± 0.43	3.19 ± 0.75	2.94 ± 0.77	3.29 ± 0.57
'ACBT'	3.42 ± 0.29	3.39 ± 0.53	2.79 ± 0.71	3.01 ± 0.82
Diaphragmatic breathing	3.21 ± 0.64	3.21 ± 0.74	3.04 ± 1.13	3.01 ± 0.82
Rectangular breathing	3.07 ± 0.96	3.50 ± 0.92	2.54 ± 0.82	2.95 ± 0.65
'Sports for COPD'	2.90 ± 0.80	2.80 ± 0.51	3.00 ± 0.84	2.95 ± 0.65
Pursed lip breathing	3.08 ± 0.67	2.96 ± 0.73	2.54 ± 0.77	2.93 ± 0.69
Huff cough	3.17 ± 0.66	3.11 ± 0.42	2.44 ± 0.60	2.91 ± 0.53
Hand-held fan	3.11 ± 1.21	2.89 ± 1.15	2.61 ± 1.13	2.89 ± 1.21
Walking for COPD	2.60 ± 0.73	3.20 ± 0.95	2.95 ± 1.27	2.89 ± 0.82



Figure 2. Examples of magazine content

Conclusions

This project has identified a new strategy to collate evidence-based audio-visual self-management digital resources for people with COPD, offering trustworthy information in a user-friendly digital format. However, improved quality is necessary in future video self-management content.



<https://www.ipcrgrg.org/copdmagazine>



References

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