A Critical Analysis of Online Patient Education Resources Geared towards Self-Management for People living with Chronic Obstructive Pulmonary Disease (COPD)

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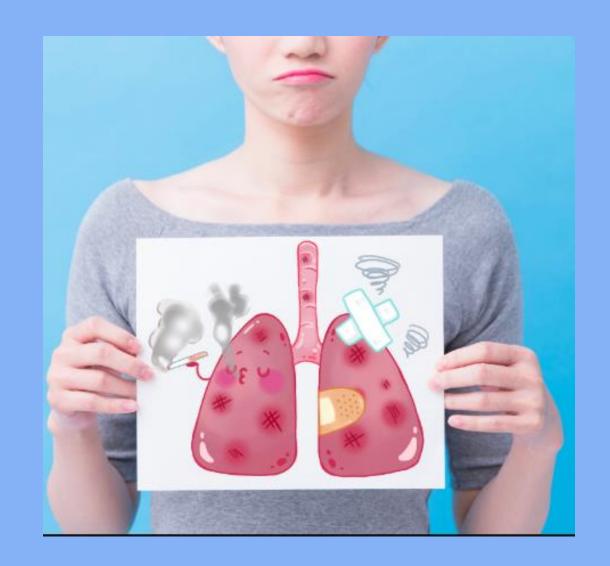
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Introduction

Daily, Canadians search the internet for information about health issues including living with chronic diseases such as COPD. However, there is limited knowledge about the quality of this information including online patient education material.

The **purpose** of this study was to evaluate online patient education material geared towards self-management for people living with COPD.

Methods

Following an established method of website evaluation[1], an online search was conducted using Google with the following search terms;

COPD
COPD + self-care
COPD + health information
COPD + disease management

20 Websites were then evaluated using the <u>CRAAP</u> [2] and <u>DISCERN</u> [3,4] tools. These websites included;

- 7 associations/foundations
- 4 governmental websites
- 9 "other" websites

Evaluation Criteria

Currency: *The timeliness of the information.*
- When was the information published or posted?
- Has the information been revised or updated?
- Does your topic require current information, or will older sources work as well?
- ▪ Are the links functional?

Relevance: *The importance of the information for your needs.*
- Does the information relate to your topic or answer your question?
- Who is the intended audience?
- Is the information at an appropriate level (i.e. not too elementary or advanced for your needs)?
- Have you looked at a variety of sources before determining this is one you will use?
- Would you be comfortable citing this source in your research paper?

Authority: *The source of the information.*
- Who is the author/publisher/source/sponsor?
- What are the author's credentials or organizational affiliations?
- Is the author qualified to write on the topic?
- Is there contact information, such as a publisher or email address?
- ▪ Does the URL reveal anything about the author or source?
  examples: .com .edu .gov .org .net

Accuracy: *The reliability, truthfulness and correctness of the content.*
- Where does the information come from?
- Is the information supported by evidence?
- Has the information been reviewed or refereed?
- Can you verify any of the information in another source or from personal knowledge?
- Does the language or tone seem unbiased and free of emotion?
- Are there spelling, grammar or typographical errors?

Purpose: *The reason the information exists.*
- What is the purpose of the information? Is it to inform, teach, sell, entertain or persuade?
- Do the authors/sponsors make their intentions or purpose clear?
- Is the information fact, opinion or propaganda?
- Does the point of view appear objective and impartial?
- Are there political, ideological, cultural, religious, institutional or personal biases?

Section 2

HOW GOOD IS THE QUALITY OF INFORMATION ON TREATMENT CHOICES?

N.B. The questions apply to the treatment (or treatments) described *in the publication.* Self-care is considered a form of treatment throughout this section.

9 Does it describe how each treatment works?

No		Partially		Yes
1	2	3	4	5

HINT Look for a description of how a treatment acts on the body to achieve its effect.

10 Does it describe the benefits of each treatment?

No		Partially		Yes
1	2	3	4	5

HINT Benefits can include controlling or getting rid of symptoms, preventing recurrence of the condition and eliminating the condition, both short-term and long-term.

11 Does it describe the risks of each treatment?

No		Partially		Yes
1	2	3	4	5

HINT Risks can include side-effects, complications and adverse reactions to treatment, both short-term and long-term.

Figure 1: The CRAAP test

Figure 2: DISCERN tool, section 2 of 3

Conclusions

- The evaluated websites often contain reliable, unbiased information, but many fail to identify their aims, refer to areas of uncertainty or provide scientific evidence.
- Using the DISCERN tool and the CRAAP test, we have determined that Wikipedia, WebMD and Mayo Clinic have the most comprehensive and patient-focused information available at this time.

Physiotherapists should be cognizant of the varying quality levels of online resources available and how the available information can change over time and provide guidance to patients on how to identify quality online patient education resources.

References and Acknowledgements

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