

August 31st, 2020 ✓

→ Applied Science Project course outline with Dr. Garcia ✓

September 2nd, 2020

→ Meeting with Dr. Camara ✓

POSSIBILITIES FOR PROJECT:

- Misinformation across the internet ✓
- Hypothetical question: If I was a patient researching my symptoms, what would I do?
- Most probable answer: Search it up on the web.
- Research the amount of information you find online and how much reliability you can find within an article
- Try with different search engines such as Bing, Yahoo, Google, etc. ✓
- What I search up does not have to be limited to one disease, trying multiple at a time is ok.
- PubMed will give you research papers that have already been published so you can use as reference and also make sure you are doing something original
- Use information online and textbooks to learn about the disease so when you find mis-info, you can infer based on your previous knowledge. ✓
- What you enter into the search bar can also change to get different answers, try using both incognito mode and personal account ✓

September 4th, 2020

→ Analyzing research papers on PubMed.

BMJ. 2000 Jul 15; 321(7254): 136.

PMCID: PMC1173379

↳ Maybe too old?

Health information on internet is often unreliable

Copyright notice

Authors?

Open access to biomedical information on the internet and through other easily accessible electronic databases has created new opportunities for doctors and patients, but much of the information is subject to manipulation because the ordinary conventions of context and the reliability of provenance are constantly in question.

↳ Google and bad

That was one of the major themes of "Freedom of Information," a conference held in New York's Academy of Medicine on 6 and 7 July, sponsored by BioMed Central, which publishes peer reviewed clinical research reports that are available through the internet.

→ Now we also have news articles and blogs.

"On the internet anything goes and that's all right," said George Lundberg, editor of the online medical website Medscape.com and former editor in chief of the journal of the American Medical Association.

"But anyone can be an author and fake the whole thing. How do we filter that?" he asked.

↳ not a reliable enough source

One of the issues that came up during the conference was the contrasting benefits and pitfalls of making primary medical research available to consumers. Last year Harold Varmus, then director of the National Institutes of Health, proposed the creation of a complete on-line archive for all medical and biological research that would give everyone easy and free of charge access to the latest medical research.

↳ Pub Med, NCBI, Google Scholar

The scientific community has welcomed the prospect of using the internet to provide fast and effective distribution of research findings, but the publishing industry has, with a few notable exceptions, yet to support the initiative fully.

→ You have cancer when you really don't

Another theme was the increasing and sometimes dangerous availability of fictitious medical treatments through the internet. John H Renner, chief medical officer of HealthScout.com and president of the National Council for Reliable Health Information, said he was once able to buy "T Cells" on-line.

Companies trying to sell you
fake medicines

After purchasing the product, he called the company to report that he had inadvertently "taken the entire bottle" and a secretary told him: "Oh, they won't hurt you."

The biggest problem with obtaining health information from the internet is that it is not always easy to decide what is reliable. One panellist referred to a well publicised study that appeared in the professional journal *Cancer*. J Sybil Biermann and her colleagues at the University of Michigan found that one website reported the mortality for a certain type of bone cancer as 5%, while in reality it was closer to 75%. Such misinformation could be devastating, the panellist said.

↳ Misinformation can create

More than 25 million people will use the internet to search for health information, says the Federal Trade Commission. Estimates vary at the number of medically related sites are on the web, but they number at least 100 000. Only about half these sites have their content reviewed by doctors.

Panellists agreed that the promise of the web is the promise of global medical information. But what searchers—some curious, some desperate—will find are the good, the bad, and the ugliest of the internet.

Doctors are there to help you treat, not the internet

Again, it is not completely terrible to use the internet

One medical editor who attended the conference said the danger is medical websites that would lead patients to diagnosis and treat their own conditions. "There's a reason why doctors go through years of training," said Ivan Oransky, editor of *Praxis Post*, a recently launched medical web magazine (<http://www.praxis.md>). "It's called clinical experience. That's why peer reviewed websites are so important," he said.

what are these websites?

Ultimately, most panellists agreed that it would be difficult to guard fully against those who were bent on disseminating false medical information or misleading consumers into purchasing "snake oil" medical treatments.

"But the day you can regulate the internet is the day we have one world government," said Lundberg. "It's not going to happen anytime soon." ↗ Impossible to stop lies from spreading, esp. anytime soon.

Articles from The BMJ are provided here courtesy of **BMJ Publishing Group**

September 9th, 2020

→ Web MD

- A medical news and information site
- "Internet's unofficial Doctor."
- "Its content is "a credible, authoritative source of health information," according to its editorial policy.

Misinformation of COVID-19 on the Internet: Infodemiology Study

Jose Yunam Cuan-Baltazar #¹, Maria José Muñoz-Perez^{1 2}, Carolina Robledo-Vega¹, Maria Fernanda Pérez-Zepeda¹, Elena Soto-Vega¹ ✓

Affiliations

PMID: 32250960 PMCID: PMC7147328 DOI: 10.2196/18444

Free PMC article

year of publication?

Abstract

Background: The internet has become an important source of health information for users worldwide. The novel coronavirus caused a pandemic search for information with broad dissemination of false or misleading health information.

Objective: The aim of this study was to evaluate the quality and readability of online information about the coronavirus disease (COVID-19), which was a trending topic on the internet, using validated instruments and relating the quality of information to its readability.

Methods: The search was based on the term "Wuhan Coronavirus" on the Google website (February 6, 2020). At the search time, the terms "COVID-19" or "SARS-CoV-2" (severe acute respiratory syndrome coronavirus 2) did not exist. Critical analysis was performed on the first 110 hits using the Health on the Net Foundation Code of Conduct (HONcode), the Journal of the American Medical Association (JAMA) benchmark, the DISCERN instrument, and Google ranking. ✓

*any notes on
this paper?*

Results: The first 110 websites were critically analyzed, and only 1.8% (n=2) of the websites had the HONcode seal. The JAMA benchmark showed that 39.1% (n=43) of the websites did not have any of the categories required by this tool, and only 10.0% (11/110) of the websites had the four quality criteria required by JAMA. The DISCERN score showed that 70.0% (n=77) of the websites were evaluated as having a low score and none were rated as having a high score.

Conclusions: Nonhealth personnel and the scientific community need to be aware about the quality of the information they read and produce, respectively. The Wuhan coronavirus health crisis misinformation was produced by the media, and the misinformation was obtained by users from the internet. The use of the internet has a risk to public health, and, in cases like this, the governments should be developing strategies to regulate health information on the internet without censoring the population. By February 6, 2020, no quality information was available on the internet about COVID-19.

Keywords: COVID-19; DISCERN instrument; HONcode; JAMA benchmarks; Wuhan coronavirus; epidemiology; health information seeking; information quality; misinformation; nCoV; public health.

September 11th, 2020

Today's motive : Researching lung diseases that relate to covid-19 and their effects. + misinformation spread on the internet about them. ✓

-ACCORDING TO CDC- (webpage?) US

→ People with cancer, chronic kidney disease, COPD, obesity, sickle cell disease and type 2 diabetes are at an increased risk for COVID-19

→ People with chronic lung disease are at high risk of complications from COVID-19.

↳ Individuals should strive to maintain their current regimen, medication, exercise in order to reduce potential exposure to COVID-19.

↳ an increased risk for

↳ People over 65

↳ compromised immune system

↳ with underlying medical conditions.

↳ Air quality, smoking and/or vaping can also increase risk of COVID-19.

Canada → For patients with cancer, Cancer Centre Ontario recommends more frequent visits to the doctor and regular testing.

↳ Cancer and such treatment weaken your immune systems, which puts you in a higher

*Why
did you
choose
ON?*

risk of getting COVID-19.

↳ Still, COVID-19 has very mild symptoms,

making it harder to figure out whether symptoms can be life-threatening or not.

↳ Fear and anxiety related to cancer and getting COVID-19 is normal.

↳ LONG TERM EFFECTS ARE LEFT BEHIND BY COVID-19 CAUSING A HARDER RECOVERY FOR CANCER PATIENTS.

POSSIBLE PROJECT PROPOSAL TITLE:

Effects of COVID-19 on other respiratory diseases and and common misinformation on the internet

How are you going to link theory two?

September 15th, 2020

Today's motive: Layout Project Proposal!

→ Working Title: look above in orange box

→ Abstract: With many people contracting COVID-19 with underlying medical conditions, it is important to find out how this may affect such people and whether if sources from the internet are reliable enough.

→ Introduction:

↳ What is COVID?

↳ What are some respiratory diseases related to COVID?

↳ How many people have contracted COVID that also have underlying diseases? (How are you going to get this data?)

↳ How is this number significant and why can it be important to conduct this experiment?

→ Objectives:

↳ Short term goal: How efficiently can you rely on the internet to give you information on COVID-19? reliable? is the COVID-19 info

↳ long term goal: ?

→ **Variables:**

↳ Independent variable: Keywords, questions, phrases inputted into different search engines, such as Google, Yahoo, Bing, etc.

↳ Dependent variable: Outcome of different websites and resources

↳ Controlled variable: Time period, search engine (at a time), device used, country or research.

↳ Confounding variable: Website recognition

→ **Questions or Hypothesis:** I believe that information on the internet will only be reliable to a certain degree and will not prove useful for complete research. A physician's opinion will be required on this matter for a more accurate and precise conclusion.

→ **Methodology:** A data collection based solely on what feedback you receive from the internet. We will test this through inputting words into a search bar and examining the results we receive.

→ **Significance:** This experiment can be useful to help civilians in understanding how healthy/unhealthy using a search engine to research about chronic diseases can be. It gives people an understanding of the useful/unuseful information on the internet.

→ **Reference:** Use Mendeleev for gathering sufficient references. Main websites include:

↳ Centre for Disease Control

↳ www.Lung.ca

↳ WebMD

↳ PUB Med

↳ Cancer.ca

↳ Cancer Ontario

September 17th, 2020

- Worked on project proposal. (Details, please!)

September 21st, 2020

Article: Thank you, WebMD, but it's not Cancer
Hailey Bondy.

"If you have a pigment that runs through your nail like a color, you go to WebMD, you look up 'dark pigment,' and it will say it's possibly a melanoma," said Splichal in an interview with The Outline. "I have patients freaking out. Most of the time it's just a pigment."

— reads the disclaimer: "WebMD does not provide medical advice, diagnosis or treatment."

"WebMD is not a diagnostic tool and should not be used to self-diagnose," said Garrison in an email to The Outline. "Our content and the information available on symptoms are intended for informational purposes and to support people in taking action for their health."

September 23rd, 2020

- Worked on project proposal - More detail, please!

September 29th, 2020

- Worked on project proposal → Any notes?

October 1st, 2020

- Project proposal finished, ask Dr. Garcia to review it.
↳ Send it by email / so I can give feedback

October 16th, 2020

(These are
two weeks
of notes
missing!)

Work on presentation

↳ go by rubric

Overview:

1. Introduction

↳ What is Covid-19?

→ An infectious disease caused by multiple previous coronaviruses.

→ These patients are immunocompromised (those with pre-existing diseases and are at a higher risk of getting COVID-19. Write why this matters and what you're going to do with it)

↳ Misinformation ✓

→ Multiple cases with previous diseases where conspiracy theories and false rumours spread

→ What is going on with COVID?

2. Objective

↳ Short term goal: To determine accuracy of sources online in relation to COVID-19 and some other condition ✓

↳ Long term goal: Means of protection or prevention of using this misinformation. (Such as an APPLICATION or CHROME EXTENSION) ✓

3. Methodology

— Give brief overview of each step.

↳ Step 1: Use a computer that does not belong to you so previous searches do not influence current data. ✓

↳ Step 2: Conduct experiment on multiple search engines (which ones?)

↳ Step 3: Search for "COVID-19 + 'Other disease'"

↓ ?
Interchangeable
term

Dont forget to include in methodology:

- Purpose of using multiple search engines ✓
- The usage of instrument to conduct articles reliability
(ensure of which exact instrument to use) ✓
- Time this experiment will take (2-3 hours at one sitting)
(not important!)
- Ethical considerations (none?) ✓

4. Variables (use from research proposal)

- ↳ Independent: - Different phrases used for COVID-19
 - Different conditions inserted in search bar
 - Experiment incognito mode ?
- ↳ Dependent: - What comes back, top 100 links? 10? 20?
(time considerations)
- ↳ Controlled: - Device used. (Computer?)
 - Time frame so new results don't influence previous data
- ↳ Confounding?

October 20th, 2020

→ Email received from Dr. Lemarroy (Send dates about discussing)

→ Work on presentation

5. Hypothesis

- ↳ I predict there will be more unsourced information compared to sourced. ✓

(where's quality of information in hypothesis?)

6. Significance

- ↳ This research is detrimental to those patients with underlying malignancies that are worried of getting a new lung disease which can change their health in an unpleasant way.
- ↳ By finding such information, a service will be done to online readers who fully believe what

misinformation is detrimental but your research will help!

the media throws at them.

↳ In a larger perspective, this experiment helps bring understanding whether the internet is a reliable place for users to get health information from.

↳ ADD BIBLIOGRAPHY! ✓

October 22nd, 2020

→ Work on presentation ✓

→ Work on research proposal

↳ Look at papers Sourcing JAMA, ✓

→ Work on AMA format ✓

→ ~ Article Notes ~

SAPS-Cov-2 and cancer: Are they really partners in crime? 2020, Sept Author, year

↳ Patients with ongoing or recent cancer treatment for advanced active disease, metastatic solid tumours and hematological malignancies are higher at risk for developing severe COVID-19 respiratory disease that requires hospitalization [and] have poorer disease outcomes compared to individuals without cancer. ✓

↳ Not clear whether these are independent risk factors, or mainly driven by male, gender, age, obesity, performance status, uncontrolled diabetes, cardiovascular disease and other med. conditions. ✓

↳ Patients with cancer often have severe morbidity. Out of 28 cancer patients observed in Wuhan, 15 had developed serious complications and 8 had died due to the coronavirus ✓

↳ The open SAFELY study, looking at factors associated with 5683 Covid-19 hospital related deaths, clearly showed that mortality was higher in Cancer patients with solid tumours the first 5 years after treatment AND lifelong for patients with hematologic IV tumours.

↳ Conclusion: Not enough information about this new disease allows us to make conclusions about the certain impact of COVID-19 on cancer patients.

Other entangled risk factors involve older age, comorbidity, and obesity. ✓

October 26th, 2020

Work on presentation for research proposal.

↳ Add pictures ✓

↳ Add references ✓

↳ For hypothesis:

"COVID-19 Prevention and Treatment Information..." Author, year
April 2020 helps keep track of it.

↳ The objective was to evaluate the quality of information regarding the prevention and treatment of COVID-19 of online resources.

↳ In conclusion, using JAMA, DISCERN, and EQIP, it was determined that tools online were inadequate. It necessitated improvements in online resources to facilitate public health measures during the pandemic.

This paper leads to my hypothesis by making the conclusion that the information online is unreliable based on the previous studies conducted.

October 28th, 2020

↳ To do:

- Meet with my mentor ✓

- Ask questions that I was unable to answer in my presentation. ✓

- Strengthen my methodology:

→ What tool will I be using to determine the accuracy / reliability of ✓

my article?

→ Will I be assessing manually? If so, is that even reliable enough and what am I looking for when analyzing each website/article?

- Hand in research proposal once methodology is fixed.
- Make introduction for Coronavirus shorter. It is not required. My research revolves around misinformation on the web and not the disease itself.

Methodology

In the article "COVID-19 prevention and treatment information on the internet: a systematic analysis and quality assessment," the tools JAMA, DISCERN and EQIP was used.

In another paper, "Quality of online information for the general public on COVID-19, conducted a similar research using Google, Bing, and Yahoo!.

This paper used the [Flesch Reading Ease Score (FRES)], LIDA tool, and the DISCERN instrument to assess readability, usability and reliability and quality. These strategies have been used in various instances before and were reliable in determining quality of other papers.

Another paper on Coronavirus information titled "Assessment of Health Information About COVID-19 Prevention on the Internet," took a different approach.

The object was simply to investigate the information online. The paper consisted of a "discussion" section which discussed the adherence of the information available on the internet to the WHO basic protective measures.

Against COVID-19. This simply observes the type of information on the WHO website such as the weblinks provided by WHO and how many of those links hold accurate information in the application of masks and self-prevention. It analyzed how frequent the changes on the websites were, and how many internet users visited the website daily. In conclusion, although this website serves a purpose by only evaluating the WHO website, its focus is on the content uploaded and not the quantifying of several websites based on accuracy, good literature and reliability.

OVERALL ANALYSIS OF PAPERS READ:

- Online tools and combinations used, vary from paper to paper depending on the use of the tool.
- The most common methods observed were JAMA benchmark, DISCERN tool, Google Ranking, HON code seal and the FRES scale. These were also found to be instruments used for a long time.

October 30th, 2020 ✓

Goals:

- Select which instruments to use for research
- Find papers on each and write about how they were previously used. ✓

DISCERN

This tool is a questionnaire consisting of 12 questions assessing the quality of each article.

Desc.

A benchmark with certain criteria for each paper to be information it disperses. Passed as reliable scores. Many criterions include references made for each argument.

The BISCEPN questionnaire has been previously used to determine quality. The most popular method used by researchers was this tool. Many PubMed and JAMA articles dating back to 1999 have used this method and its yearly updated

Uses in assessment

This tool is a great way of evaluating a website that holds new and current information such as COVID-19.

Conclusion

JAMA

HON code seal

A seal awarded to a website to confirm reliability of the information it disperses.

The oldest tool amongst a US, this tool consists of papers across the world that require a certain criteria

The JAMA questionnaire is a great way of evaluating a website that holds new and current information such as COVID-19.

FRES scale

The Flesch readability score is a program provided by Word to evaluate the reading grade level for an article.

This scale is great in determining who the information given in the article was written by assessing the quality of literature used by the author. Originating in circa 1975 this tool has been used by scientists, philosophers, economists and mathematicians in their research.

Google Ranking

Google ranking is an inbuilt Google tool which lists papers in order of relevancy. This allows users to view relevant document from scrolling through the different pages, to get exactly what they're looking for.

Google ranking has not been used in many areas of research and is used by those papers looking for relevance in their research. e.g., a paper studying the "The Google Ranking of Plastic Surgeons" was conducted to analyze social media presence and consumer reach.

The Google ranking system is built and only accessible through Google. It prefers relevancy > reliability making it important as part of my research.

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In conclusion, the DISCERN instrument, FRES scale and the HONcode seal will be used because of their efficiency and reliability.

Good notes for October, Ganisa, 10/10

Remember to write every class!

November 3rd, 2020

Multiple sclerosis is also known as:

Encephalomyelitis disseminata

→ A demyelinating disease in which the insulating covers of nerve cells in the brain and spinal cord are damaged.

Multiple Sclerosis: Pathogenesis, Symptoms, Diagnoses and Cell-Based therapy

Nazem Chaghami (2017)

Why am I doing MS?

Lesions in the central nervous system (CNS) lesions that can lead to severe physical or cognitive disability
In terms of COVID-19, Multiple Sclerosis patients on immunosuppressive/immunomodulatory disease modifying therapies (DMT) are generally at increased risk of infections raising concerns related to different risk or outcome in case of infection with COVID-19.

"... suggested that anti-CD20 monoclonal antibodies can increase susceptibility of MS patients to COVID-19 infection

Characteristics of COVID-19 disease in multiple sclerosis patients.

Mahdi Barzegar, Omid Mirmosayyeb (2020)

November 5th, 2020

→ Meeting with Dr. Camara (Notes)

- Title was nice but vague, better to focus on one area of research such as MS as to looking into each and every condition which may take too long
- Introduction was great...
- Methodology must be stricter and more clear, we evaluated different methods to use, he recommends I use the Flesch reading scale as it is an easy addition to my study and can evaluate the readability of each article.
- Although the objectives are clear and viable, my long term proposal is almost impossible to do as there is nothing that can be done to stop such information from finding its way into the internet at all. Stopping misinformation from spreading is not my job, I can only evaluate it to quantify reliability. It is up to people to make inferences through what they read.
- If I see myself doing similar researches in the future, I can expand research into other areas. Eg., I will continue evaluating information but instead of 'myeloma carcinoma' I can do 'multiple sclerosis'
- long term proposal: Expand research into other areas of brain conditions (or something similar)

November 9th, 2020

↳ Hand in research proposal!

→ Editing and reviewing.

→ Fix variable

① Make 2 separate variables

↳ ① Keep methods constant to see which

search engines provide most accurate content.

↳ ② Keep one search engine (maybe best one from previous experiment) to see if there is a relation in the methods used.

② Find original sources (1, 2, 6, 12, 16)

③ Fix introduction to flow smoothly and address MS before writing research question.

November 11th, 2020

Handing in research proposal.

"Evaluating asthma websites using the Brief DISCERN instrument" NANCY CANTEY BANASIAK (2017)

Purpose → Examine the quality of sponsored and unsponsored asthma websites

Methods → DISCERN, Presence of HONcode, Flesh Reading Scale

Results → From 22 websites, 68% had a score of lower than or equal to 16 (relatively low). Flesh scores were 2.9 to 15.4.

Conclusion → Because the mean grade level scores were 19.3 - 9.89, which is high for the average consumer.

→ Access to accurate information via the internet, with appropriate readability, may enable pediatric asthma patients and their caregivers to better control and manage asthma.

November 17th, 2020

Flesch-Kincaid Reading Scale

webfx.com/tools/readable/flesch-kincaid.html

What is it?

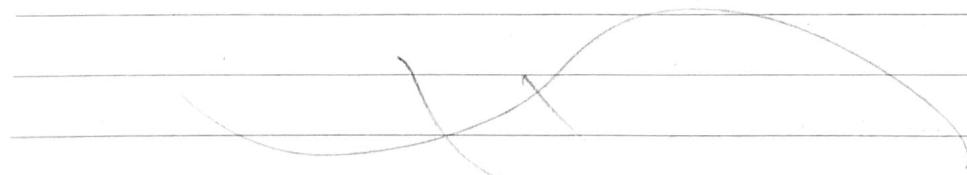
- Used for measuring readability
- Used by the U.S. military to evaluate the readability of their manuals

How to use it?

- The higher the score the better
- Based on a ranking scale of 0-100
- For most business writing, a score of 65 is a good target, and scores between 60 and 80 should be understood by 12 to 15 year olds.
- Formula: $206.855 - 1.015(\text{words}/\text{sentences}) - 84.6 \times (\text{syllables}/\text{words})$
- The second number tells you the grade-level
- Formula: $0.39 \times (\text{words}/\text{sentences}) + 11.8 \times (\frac{\text{syllables}}{\text{words}}) - 15.59$.
- Both use same core metrics (word & sentence length)

Why does it matter?

- Average adult can only read at a 7th to 9th grade level
- Important to find out what grade level the text is to attract more users, if it is too complicated and hard to understand, people will leave right away
- For a medical publication, you will want something that is of a higher level.



November 19, 2020

Systematic Literature Review on the Spread of Health-related Misinformation on Social Media

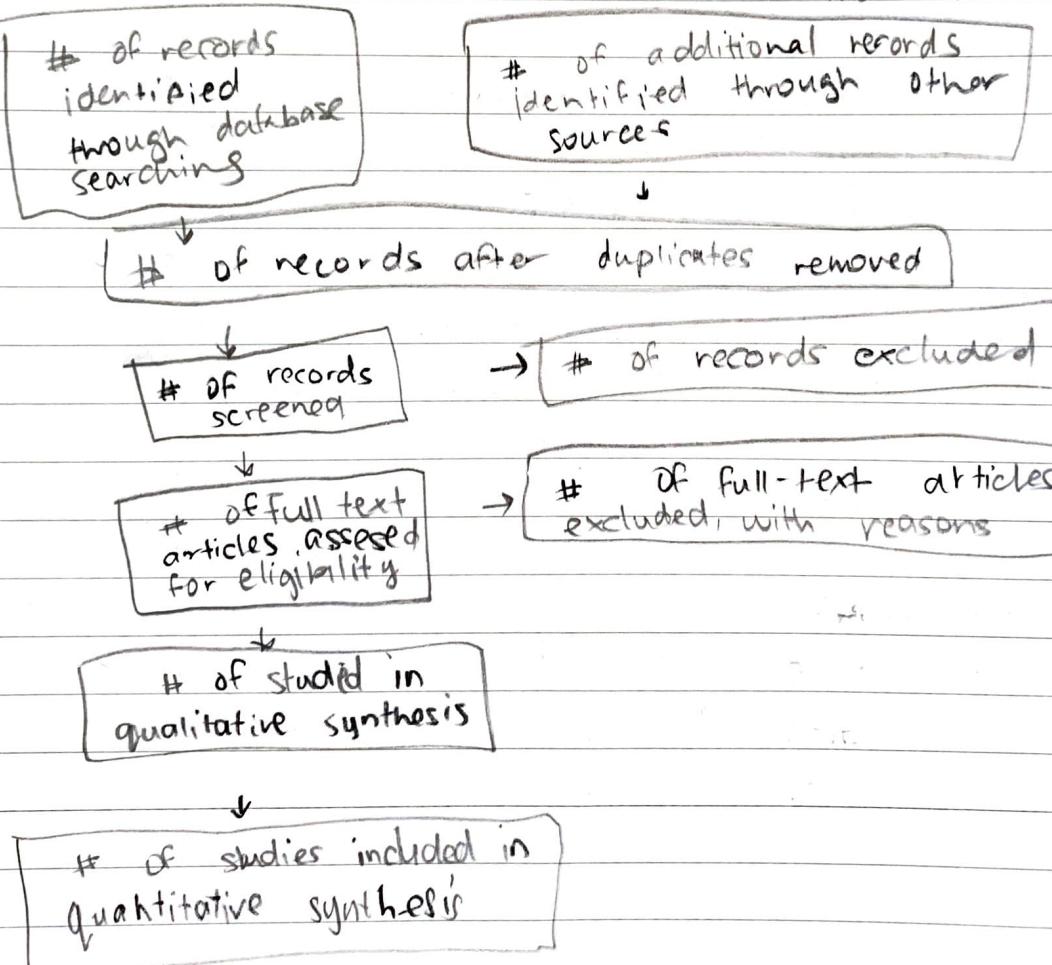
PMC 7117034

2019

- In order to uncover proof and understand the mechanism of spread of misinformation, this study was conducted. Articles from PubMed, Cochrane, Web of Science, and Scopus were used for full text analysis.
- Overall, there was an increasing trend on health-related misinformation in the articles.

Methods

- The "PRISMA" guideline was used to analyze these different search terms
- "PRISMA" is a 27 item checklist in a flow chart which can be downloaded from word



→ The aim of the PRISMA Statement is to help authors improve the reporting of systematic reviews and meta-analyses.

[Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA STATEMENT] 2009

PMC 2707599

Results

→ Articles from 2012 to 2018 were analyzed with a sharp rise of misinformation in 2017, potentially amplified by the 2016 political events.

→ The two categories with the highest spread include Infectious Disease, General Health and Others.

Conclusion:

→ Social media platforms, although providing immense opportunities for people to engage with each other in ways that are beneficial, also allow misinformation to flourish.

November 25th, 2020

Multiple Sclerosis and COVID-19

PMID 32686774

→ Not much is known about COVID-19 in relation to MS.

→ Virus mutations may occur but we are still monitoring the longer-term effects of immunomodulatory treatment in MS patients with COVID-19.

→ At this time, only prevention and social distancing is recommended, as in any other case.

→ Prevention of COVID-19 as long as targeted therapy or vaccination is not available is the most sensible approach for individuals with autoimmune diseases.

DEC EMB E R

MONDAY

TUESDAY

WEDNESDAY

THURSDAY

FRIDAY

7 Finish LR

8

9

10

* Complete
introduction

11

12 FINAL LR

13 Begin
Method/data

14

15

* Need to figure
out how to
submit.

21 MEETING WITH
DR. CAMARA

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MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
				1
			8	
		6 Meeting with Dr. Camara. (DISCERN + HONcode)	7	
			14	15 FINISH METHOD / DATA
			13	16
			12	17
			11	18 START DISCUSSION
			10 FINALIZE INFO FOR DATA Meeting	19
			9	20
			8	21
			7	22
			6	23
			5	24
			4	25
			3	26 Meeting with Dr. Camara
			2	27
			1	28
				29 Complete DATA

December 1st, 2020

Using DISCERN

(DISCERN HANDBOOK)

- Consists of 15 key questions with one overall question
- (1-8) addresses reliability of the publication and to help consider whether it can be trusted as a [source of information] about treatment choices
- (9-15) focuses on specific details of the information about treatment choices
- Question 16 - overall rating at the end of instrument use.

* Occasionally a question is not appropriate for a publication. USE JUDGEMENT in such cases and don't forget to include.

Rating scale

- Each answer is based on a scale of 1-5 ranging from 'no' to 'yes.' No inbetween marks should be given
- Partially (2-4) should be given when publication is unable to answer question to full extent
- (1) is a definite NO, while (5) is a definite YES.

Keywords

- 'Treatment' includes self-care
- 'Treatment choices' are possible treatment option including no treatment.
- 'Information' refers to information about treatment choices only.

December 3rd, 2020

HONcode seal and certificate (HONcode website)



- After the validation of a website, this logo is displayed on a website to illustrate its trustworthiness.
- Each website will give you the option to "click-to-verify" where you can view the certificate within.
- A FRAUDULENT certificate does not have the "Health on the Net Foundations URL code."

All websites dedicate 8 principle including:

- Authority (Details of editorial and site team are clearly stated.)
- Complementarity (Clear mention of the site boundaries (A.K.A not replacing physician))
- Confidentiality (Declaration explaining all legal requirements concerning personal data)
- Attribution (Site is legal and medical pages have date of last update)
- Justifiability (Health information is complete and provided in an objective and transparent manner)
- Transparency (Easy-to-use site, mission is clear and team is accessible)
- Financial disclosure (All sources of funding are identified and transparent)
- Advertisement policy (All advertisements should be identified as such and differentiated.)

→ These provide a clear guideline that must be met to attain the HONcode seal.

December 7th, 2020

→ WORK ON INTRODUCTION PAPER

- Fixing errors and formatting
- Research problem:

→ Reliability of information on the internet as COVID-19 key terms and MS are searched into different search engines.

→ Aiming to uncover accuracy through the use of DISCERN, Flesch-Kincaid and HONcode seal.

December 17th, 2020 ✓

Flesch - Kincaid Reading Scale

- Not too difficult to use or obtain,
- Just copy and paste data onto Word document, > Review > Check Accessibility.
- To calculate mean score, first you must calculate precise grade level. (1-100)
 - 90-100: Very Easy
 - 80-89: Easy
 - 60-69: Standard
 - 50-59: Fairly difficult
 - 30-49: Difficult
 - 0-29: Very Confusing.
- The expansive use of periods, colons, semi-colons, exclamation marks, etc. all play into effect.

Aanisa, there's a big gap between

Dec 7th and 17th.

Dec. 9/10

January 7th, 2020

Begin experiment

① Bing

- ↳ "COVID-19 and Multiple Sclerosis" was searched.
- ↳ [DATA IN EXCEL]

↳ Cumulative result of 63/80 for DISCERN ✓

↳ Observe only first seven websites.

↳ Only one had the HONcode Seal.

January 13th, 2020

Had to repeat experiment due to unaccurate answers such as?

January 15th, 2020

→ Meeting with Dr. Camara! ✓

↳ Scores of zero should be given to each question you cannot answer, but still be weighted out of 80. (Question 9-13)

↳ When putting data into excel, put each number individually, so the average of each question can be displayed. ✓

Eg,

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

- HONcode seal is a simple 'yes' or 'no'
- Make 12 separate tabs at bottom, 4 search engines ✓
- 3 techniques/instruments
- * SOMETIMES HONcode seal doesn't show up on website, use HONcode seal website to confirm.

January 21, 2020

- ↳ Finish HONcode seal and DISCERN for Bing ✓
- ↳ Start Google!
- Question 4, ask Dr. Camara *

January 25th, 2020

- ↳ Meeting with Dr. Camara.
- ↳ For question 4,
 - ↳ A good quality publication will make it clear where evidence for the information ↗ about treatment choices comes from.
 - ↳ Evidence such as physicians or health experts can confirm such findings.
 - ↳ Evidence should also be listed in Bibliography! ✓
 - ↳ No bibliography means 4.
- ↳ When finishing up, take screenshot of each page so the top seven links can referred back to, if the page updates *
- ↳ In presentation, also remember to display questions from DISCERN so people know it was a questionnaire that was self answered.

January 27th, 2020

↳ Prepared Flesh-Kincaid Reading Level.

On windows :

- Go to file > Options
 - Select proofing
 - Under "When correcting spelling and grammar in Word," make sure the "Check grammar with spelling" check box is selected.
 - Select Show readability statistics
 - Then go to review > editor
- Pretty easy and accessible, my research proposal was at a grade level of 14.9!



January 29th, 2020

any details

↳ Continued working on Swisscons and Google. —
Better notes for Jan. 10/10

February 2nd, 2020

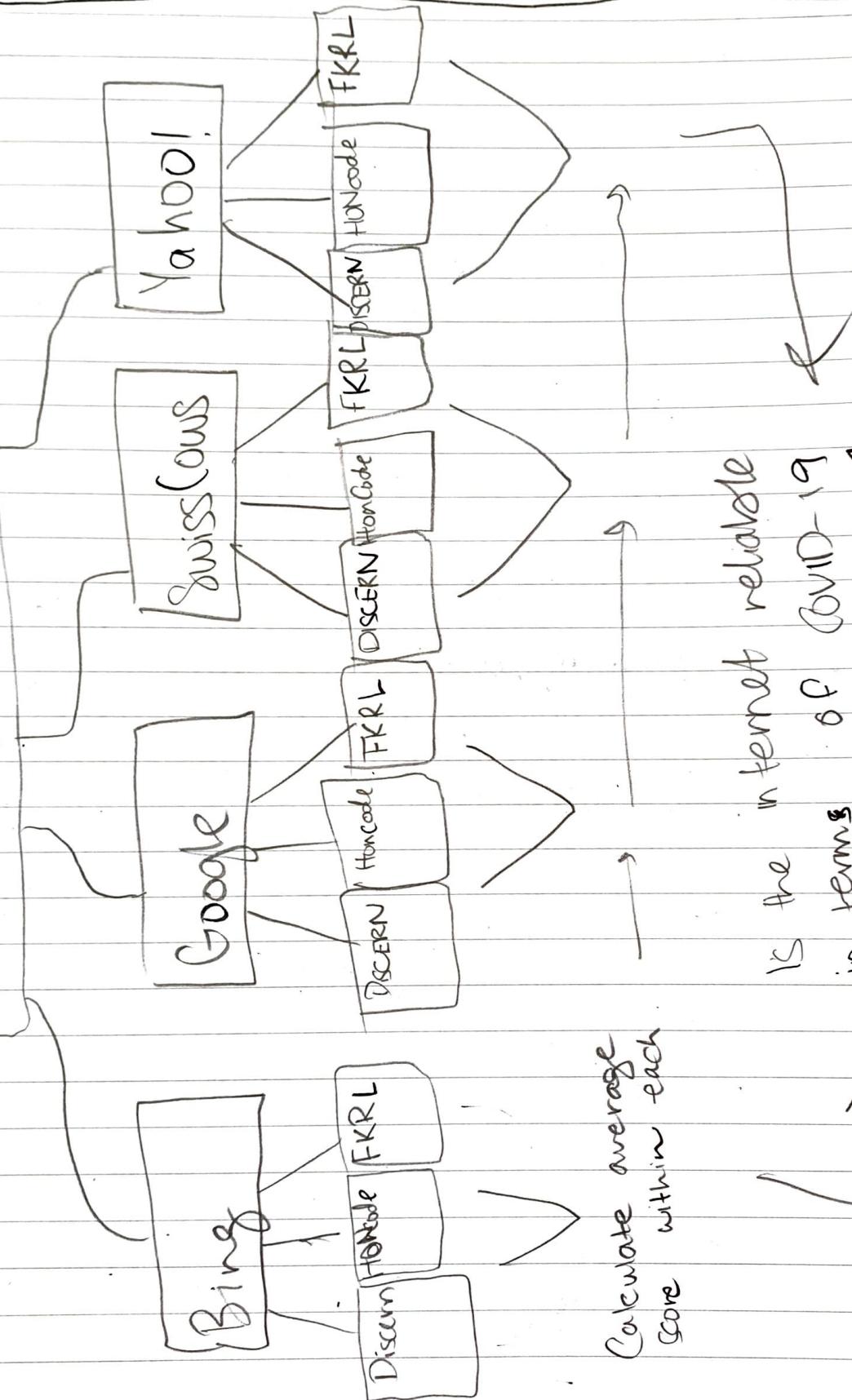
↳ Running late! Behind schedule.

Still trying to complete data collection. So far done completely with Bing, some websites don't explicitly state presence of HONcode seal.

February 10th, 2020

Meeting with Dr. Camara + Dr. Garcia!

Using incognito mode on chrome,
search up four different
search engines



Is the internet reliable
in terms of COVID-19
and Multiple Sclerosis?