Information Literacy of Online Health Consumers in Minnesota

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Information Literacy of Online Health Consumers in Minnesota

Georgia International Conference on Information Literacy
September 27 - 29, 2018
Savannah, GA

Slides: z.umn.edu/GICOIL-onlinehealth
BACKGROUND
Minnesota Electronic Health Library
MeHL
Minnesota Electronic Health Library

Data Collection
Studies of civilians, pharmacists, physicians

More Information
https://hsl.lib.umn.edu/about/mehl
2

SETTING

Minnesota State Fair
MINNESOTA STATE FAIR

Two Million in Attendance
3

METHODS

Mixed Methods
THE RESEARCH QUESTIONS

What online sources do Minnesotans use to answer their health questions?

How do Minnesotans use the online health information they find?

How confident are Minnesotans’ in their ability to evaluate the quality of online health information?

What do Minnesotans feel is missing from online sources of health information that are currently available?
Sample of surveys we used:

- Patient Activation Measure - 13
- eHealth Literacy Scale
- Indicators of Accuracy of Consumer Health Information on the Internet

We created additional questions on navigation of websites, demographics, and the “perfect” online health source.
LIMITATIONS

Convenience sample
Response bias

Limitations are a part of every study, and are often balanced out by other considerations.

- Anonymity
- Benign topics
- Natural behavior
- Data collection on attitudes
RESULTS

Online health consumer beliefs and behavior
255 PARTICIPANTS

- 74% Female
- 72% Highly Educated
- 19% Worked in Healthcare
POPULATION DENSITY OF PARTICIPANTS

Legend

Population Density 2015
People Per Square Mile by ZIP Code

- 0.00 - 271.20
- 271.21 - 856.00
- 856.01 - 1779.10
- 1779.11 - 3153.82
- 3153.83 - 5346.90
- 5346.91 - 8541.60
- 8541.61 - 10248.00
NAVIGATIONAL BEHAVIORS

- I Google it
- WebMD
- Other
- Mayo Clinic website
- MyChart (or email my doctor)
- An organization website
- Wikipedia
- PubMed / Medline database
- My library's website

[Bar chart showing frequency of navigational behaviors]
USE OF INFORMATION

- 78% discussed the information with a health professional
- 76% shared the information with a friend or family member
- 74% used the information to decide when to see a health professional
### SELF PERCEPTIONS

<table>
<thead>
<tr>
<th>Increased their perceived knowledge of:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature and cause of a health condition</td>
<td>88%</td>
</tr>
<tr>
<td>Medical treatment options</td>
<td>88%</td>
</tr>
<tr>
<td>Preventing further issues with a health condition</td>
<td>75%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Increased their perceived confidence around:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaking with a provider about concerns</td>
<td>87%</td>
</tr>
<tr>
<td>When to seek professional medical care</td>
<td>83%</td>
</tr>
<tr>
<td>Maintaining lifestyle changes such as diet and exercise</td>
<td>64%</td>
</tr>
<tr>
<td>Making smart decisions as a caregiver</td>
<td>63%</td>
</tr>
</tbody>
</table>
PERCEIVED INDICATORS OF WEBSITE QUALITY
QUALITATIVE THEMES

- Trusted versus Distrusted Sources
- Characteristics of the Ideal Source
Online health information should come from “...an unbiased source that provides information without trying to sell you something. Company websites are okay; government or educational sites are better.”
“Clear linkage to clinical study data or summary, or if none exists, then a standard statement saying so.”
5 RECOMMENDATIONS

Applying results in education
STRATEGIES FOR EDUCATION

- **Navigate**
  Direct students to the most efficient route to online health information and show them how to personalize their experience.

- **Assess**
  Give students the skills they need to accurately assess the value, trustworthiness, and relevancy of a health website.

- **Partner**
  Look to your fellow teachers, including public and academic librarians, for opportunities for mass education.
Teach Personalization in Navigation

The “one-stop-shop” doesn’t safely exist, so show health consumers how to personalize what is available to them.
Tailored to language needs

**MedlinePlus**
Made for the average consumer
Providing fewer language sources
Direct translations
Many languages
Audio/visual

**Health Reach**
Health information in many languages
MedlinePlus is referring to Health Reach
Family planning & some refugee info removed

**Multicultural & Multilingual Health Information**
UMN Health Sciences Libraries
Tailored to specific characteristics

NIH Senior Health
Retired in 2017
Referring people to
  Medline Plus
  National Institute on Aging
  Go4Life

Eunice Kennedy Shriver National Institute on Child Health & Human Development
Larger mission
A - Z health topics
Women’s health (maternal health?)

Office on Women’s Health
More info on National Institute on Aging
What happens if you leave a splinter in your skin for too long

https://www.youtube.com/watch?v=MboxdG2EZA0

https://www.youtube.com/watch?v=25HLKj1ZA2Y

Tailored to learning style
Teach How to Assess Quality of Health Websites

A set of criteria versus one or two indicators is the best strategy according to the evidence available.
List of criteria

- Who is sponsoring the information?
- Who is authoring the information?
- Is there reliable contact information?
- Does the information appear biased?
- Can you verify that the information is accurate?
- Has the website been reviewed by qualified professionals?
- Is the information up to date?
- Are there sufficient privacy protections in place?
- Does the website encourage medical advice from a professional?
Evaluation templates & resources

Online Health Information Scorecard

Tutorial: Evaluating Internet Health Information (16 min)

Finding & Evaluation Online Resources

Trust It or Trash It?
Address the issue of advertisements

Mayo Clinic does not endorse companies or products. Advertising revenue supports our not-for-profit mission.

Advertising & Sponsorship
Policy | Opportunities | Ad Choices

Search results 1-10 of 3280 for allergies

**Allergies - Symptoms and causes - Mayo Clinic**
https://www.mayoclinic.org/diseases-conditions/allergies/symptoms-causes/syc-20351497 - 58k

... including Anaphylaxis. If you have severe *allergies*, you're at increased risk of this serious *allergy*-induced reaction. Foods ...

**Food allergy - Symptoms and causes - Mayo Clinic**

... Other *allergies* ... Similarly, if you have other types of allergic reactions, such as hay fever or eczema, your risk of having a *food allergy* is greater ...

**Wheat allergy - Symptoms and causes - Mayo Clinic**
https://www.mayoclinic.org/diseases-conditions/wheat-allergy/symptoms-causes/syc-2035056 - 58k

Lowest rates, free wi-fi & earn free nights
Royal Palm South Beach Miami

WebMD

Allergies Health Center
Partner with Experts to Maximize Education Efforts

Widespread education is the best way to impart knowledge to online health consumers, preventing the spread of incorrect and dangerous information.
Potential partnerships

NNLM Public Libraries Training

Schools + Public Libraries

Public + Academic Libraries

Schools + Academic Libraries

Community Outreach
Online Health Information Use, Assessment, and Gaps Identified by Minnesotans

Journal of Consumer Behavior on the Internet

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THANK YOU

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