



Evaluating Health Information on the Internet

By Diego Pineda, MS

Late one day you receive an assignment on a topic you know little about: autism. You decide you need some background information and type “autism” in Google. The results page lists more than 5 million links. A quick scan shows you sites of parent advocacy groups, research centers, government agencies, stores offering autism resources, and sites describing new miraculous treatments for the disorder.

How do you make sense of all this? How do you know which sites are reliable and scientifically accurate?

Unless you are familiar with the topic and can easily spot the bad apples in the barrel, a search engine such as Google is not the best place to start. Instead, start with a source that you know provides reliable information and that can direct you to other reliable sources of information. For example, The National Library of Medicine’s Medline Plus (www.medlineplus.gov) is one of the best places to begin a search about health matters.

How do you know which sites are reliable and scientifically accurate?

Once you are on your way with your Internet search, ask these questions about each Web site you visit.

- Does the Web site display who is responsible for the site? The site should describe the type of organization it belongs to (eg, nonprofit, government, commercial) and disclose the sources of funding.
- Is the purpose of the Web site stated? The site’s purpose should be to provide unbiased information about the health topic, not to promote a product or treatment.
- Does it provide a mission statement? The mission of the sponsor organization should be clearly stated and should be consistent with the site’s content.
- Is there a way to contact the information provider or Webmaster? Different methods of contact should be available (eg, e-mail, phone, mailing address).

Then, ask the following questions about the Web site’s content.

- Is the information slanted in favor of the Web site’s sponsor or source of funding? Health information should be accurate and unbiased.

- Do scientific experts review the medical information before it is posted on the Web site? The names, credentials, and affiliations of the Editorial Board or scientific reviewers should be made available to the readers. Remember, however, that credentials may be misleading: experts in one field may not be experts in other areas. The credentials should reflect expertise in the health topics addressed on the site.
- Does the information display the date of last revision, and is it kept up to date? The Web site should keep up with recent developments in medicine.
- What is the scientific evidence for claims made? The original source of facts and figures should be shown (eg, journal citations). Warning: Some Web sites may misquote scientific studies or take statements out of context. When possible, check the facts in the original study.
- Does the Web site rely on anecdotes about sick individuals instead of large scientific studies? Case-control studies provide a better understanding of a disease or treatment than isolated case reports.
- Are personal opinions presented as facts? Editorial and opinion pieces should be clearly identified as such.
- Is the information presented in context? Enough background information should be provided to better understand the topic.

Although not essential with regard to reliability, a good health Web site should also have the following characteristics.

Design. A professional design is more than high-quality graphics and state-of-the-art animations; it comprises logical organization of the information and ease of navigation through the different sections of the site. In other words, you should not get lost when moving around the site. A well designed site will offer a navigational menu on every page, a site map, an internal search engine, and a frequently asked questions page to help you find information.

Writing. A Web site filled with typos and grammatical errors will not make a good impression—much less among medical communicators. Proper grammar, spelling, and composition add credibility to the information because they are signs of an appropriate editorial process.

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Additional resources. A single Web site will hardly cover a health topic in its entirety. Therefore, a good site will link to other good sites that complement its information. Medical knowledge changes rapidly, so always check more than one site to make sure you have obtained the most recent information. If the information is not clear or you have questions about something not covered on the Web sites, try to obtain a clarification from the authors. Finally, it is a good idea to double-check the facts with a known source you have worked with before.

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