“‘Will You Walk into My Parlor,’ Said the Spider to the Fly...”: Avoiding Traps When Searching for Information on the Web¹

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Any consumer of the Internet needs to know how to find credible information. The Internet has become an increasingly available and utilized source of information [1], and for many patients, it can provide knowledge, comfort, and empowerment. On the other hand, it can fill them with false hope, persuade them to become noncompliant with treatments, and become a source of emotional and financial encumbrance. Without the skills to determine its validity, the web can fast become a sticky trap like that which the spider uses to snare the fly. The main problem with information on the Internet is that of quality control. With a journal or book, one can be reasonably confident that the material has passed a thorough review process. However, for most journals, a subscription is required, excluding them from most patients. The Internet on the other hand has no such process in place and anyone can post information, provide advice, and sell so-called cures.

The following is intended to serve as a guide for your patients and their families when accessing information from the Internet:

- First, identify who has written the information, their qualifications and affiliations, and whether the author provides contact details.
- Next, consider the aims or objectives of the site. Ask why the site exists, what purpose it serves, and whether the information has relevance?
- Finally, look at how old the information is.

- Ignore the appearance of the site and concentrate on the content, as it is extremely easy to download professional templates on which to construct a site.
- Ask if the information is written objectively and for whom it is written, as this can lead to biased or incomplete information.
- Content accuracy is sometimes difficult to judge, especially when researching new information, and my suggestion is to review at least three different sources to look for consistencies.
- Quality of the content such as the spelling, grammar, and structure used should also be taken into account.
- There are several accreditation organizations for health information and while it is not essential to know of them all, it is sensible to verify any that you come across on your searches.
- Domain hopping, in which a site changes from one URL to another, should also evoke caution. Often this is done to bypass local or even federal laws or to move a component of the site offshore and is often seen when the site offers items for sale [2].

Robert Park developed the “seven warning signs of bogus science” [3], and I have found these to be very useful in critiquing information, such as that found on web sites:

1. The scientific claim is announced directly to the media, rather than via a journal, conference, or other scientific committee.
2. A conspiracy theory exists in which one party is trying to prevent you from finding out the truth.
3. The scientific benefit is small or difficult to measure.
4. The author relies upon anecdotal evidence to support their claim.
5. Credibility is directly proportional to the time period for which it has existed.

¹Howitt M (1829) The spider and the fly.

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6. The discoverer worked in isolation.
7. A new law of nature is required to explain the discovery.

Additional tricks are used to pass off dubious information, including the use of pictures to evoke an emotional connection, linking their information to passages from religious texts, or drawing parallels with common knowledge. For example, substance *X* prevents cancer the same way that limes prevent scurvy.

Most alarming, however, are sites that advise patients to stop conventional treatments. These sites pose a grave danger to patients, and all health-related information on the web should advise patients to discuss its content with their treating physician.

While it may seem remarkable that anyone would believe some of the information on the web, one should not underestimate the desperation of some individuals and the length that they will go to in the pursuit of a cure or relief of symptoms. Exacerbating this problem further is the increasing number of health professionals that also offer alternative treatments that have not been proven to be of benefit.

The Internet has opened a vast wealth of information (and disinformation) to cancer patients and their fami-

lies, and increasing numbers are attending consultations armed with information from the Internet. Most patients will present to their general practitioner (GP) within 2 days of receiving a cancer diagnosis [4], and it is often the role of the GP to act as a liaison between the patient and the specialists involved in his or her management [5]. As such, we need to ensure that all doctors have the necessary skills to be able to aid their patients in avoiding the pitfalls of the internet and not be lured into the spider web.

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