New Media

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The Dark Side of the Internet

In recent months, there has been considerable discussion in the media about information of dubious value available on the Internet. Examples include deliberate misinformation (often aimed at discrediting commercial or political competitors), "cyberporn", racial and religious hate literature, and even technical information on the construction of bombs. For example, in an attempt to find out how easy it is to obtain such information on the Internet I once used a search engine along with the keyword "ATOMIC BOMB" to obtain a detailed 40-page manuscript on the design and construction of a crude thermonuclear device. (At least they did not provide a Russian address to order weapons-grade plutonium!). Information on the construction of more conventional weapons, such as pipe bombs or fertilizer bombs, is also available, and is even more likely to be used to bad ends. Finally, the Internet is loaded with gems for individuals interested in credit card fraud, telephone fraud, or computer crimes such as "hacking" and "cracking" (the art and science of gaining unauthorized entry into other people's computer systems.)

In the medical arena there is concern that medical information posted on the Internet may mislead individuals without medical training (or even physicians themselves). This is particularly true with respect to "alternative medicine" sites which offer information on herbal remedies, iridology (diagnosis of systemic disorders from examination of the iris), foot reflexology (application of focused pressure to "reflex" points in the foot), homeopathy, and other unproven therapies. In many cases the information is provided with the understanding that it is offered for "research pur-

poses only", as if this provides some form of legal protection against occasional clinical misadventures.

Similarly, there is controversy about Death Net (<http://www.islandnet.com/deathnet>), a free Internet service that includes carefully researched information on humane methods of suicide and euthanasia. (Even more upsetting is a similarly named site at www.deathnet.com, which offers macabre images and videos of death and dismemberment for those willing to pay!)

This whole issue of medical information on the Internet led one newspaper to state in a headline "The Internet May Be Harmful to Your Health!"

A number of approaches have been undertaken to deal with these challenges.

For example, software is commercially available from several sources which is designed to prevent children (or public library patrons, etc.) from accessing certain newsgroups or Web sites known to contain sexually explicit material or other "unsuitable" material. Examples include Net Nanny, WebChaperone, CyberPatrol, CyberSitter and other packages.

As well, legislative action has been undertaken in a number of countries to attempt to provide varying degrees of government control over online resources. In some cases, national "firewalls" exist that allow only certain acceptable Internet addresses, while other systems maintain a long list of forbidden sites. Perhaps even more important, though, parents and educators are instructing children (and adults) to develop a critical eye about what they read on the Internet, regardless of the source. This is, in some ways, no different from the art of literature appraisal that most medical students and residents are exposed to in their training.

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An opposing viewpoint has also developed. Proponents argue that the "First Amendment" rights still apply to Internet material (at least in the United States) even if the material is vulgar or distasteful. They also argue that socially and culturally offensive information over which many people express distress is often more readily available in magazine shops, bookstores and libraries. Also, some vendors of "filtering" software that prevent children from being exposed to "inappropriate" material sometimes also prevent access to left-of centre political organizations such as the National Organization of Women and other sites not deemed to be "family-oriented".

Regardless of how you feel about these issues, there can be little doubt that the Internet has profoundly changed the world.

Some Web Sites to Help Combat Internet Misinformation

- [1] James Randi Educational Foundation.
<http://www.randi.org/>
- [2] Internet Scambusters.
<http://www.scambusters.com/>
- [3] The Disinformation Company.
<http://disinfo.com/>
- [4] Quackwatch Guide to Health Fraud,
Quackery, and Intelligent Decisions.
<http://www.quackwatch.com/>
- [5] Junk Science Home Page.
<http://www.junkscience.com/>

Oyston Special Selection

Dr. John Oyston provides a series of web site suggestions for readers. This month, he suggests an obstetrical site.

Why Mothers Die

Anyone with a serious interest in obstetrical anesthesia should be aware of the "Report of Confidential Enquiries into Maternal Deaths in the United Kingdom". This report is published every three years, and details every maternal death in the U.K. It is, therefore, possible to determine the outcome of changes in anesthesia practice over time, in terms of changes in the pattern of maternal mortality.

The report used to be difficult to obtain, as it is published by the government rather than a commercial publisher. However, since December 1998, the latest report (for the years 1994-1996) has been available on the Web at <http://www.official-documents.co.uk/document/doh/wmd/wmd-hm.htm>. The official title of the report, "Why Mothers Die", is a refreshingly blunt title for a government document!

There is a chapter devoted to "Deaths Associated with Anaesthesia" but, remarkably, there was only one such case (due to an overdose of spinal anesthesia and inappropriate resuscitation). The chapter is mainly concerned with the role of anesthesia and intensive care in treating obstetrical complications. The case reports make interesting reading, and serve as a useful reminder that every pregnancy is a potential anesthetic disaster.

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Anesthesia in the Antarctic

In their quest to visit the Web site for the American Society of Anesthesiologists (www.asahq.org), many anesthesiologists have inadvertently become familiar with Antarctic Support Services (www.asa.org), an American company under contract to the (American) National Science Foundation to provide a range of science support services to the United States Antarctic Program. No doubt, an American presence in the Antarctic is important politically and scientifically, which helps explain why 10 women and 31 men, mostly scientific and support personnel, agree to work in the harshest terrestrial winter environment known to mankind: 24-hour-a-day darkness, temperatures 50°C below zero or worse, and with crosswinds sometimes exceeding 100 km·hr⁻¹. In addition, the barometric pressure is particularly low (average elevation 2300 meters), so that hypoxemia is always a concern. Personal hygiene can also be a challenge: showers are limited to two minutes duration. Since the nearest people are 1,350 km away, at another research station, and since personnel cannot be evacuated, even by air, until winter ends in October or November, the need for self-sufficiency, especially in medical matters, is obvious. Naturally, all personnel are carefully screened medically before being sent to the South Pole, but clinical problems can still arise, such as in a recent report (Toronto Star July 9, 1999) of 47-yr-old scientist who signed up for a year-long stint and who subsequently detected a breast lump but who must now wait several anxiety-laden months before definitive care is possible following Antarctic evacuation. The need for modest anesthetic and surgical self-sufficiency, as well as good telemedicine support via satellite, is clear. On reading this commentary, perhaps anesthesiologists will debate among themselves the most appropriate anesthetic techniques for the large variety of surgical procedures that might reasonably become required for the toughest environment on earth. In any event, this story demonstrates the interesting connections some Web address errors can lead to.