

Alternative medicine and the Internet

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WHAT IS ALTERNATIVE MEDICINE?

Alternative medicine (AM) can be defined as any health care remedy or system that is not generally accepted in modern biomedicine, or therapies that are offered in place of or as substitutes for conventional therapies (1). Alternative therapies include the following: folk medicine, herbal medicine, diet fads, homeopathy, faith healing, Ayurvedic medicine, chiropractic, acupuncture, naturopathy, massage and music therapy. Allopathic medicine is the term used to refer to mainstream medical practice.

HOW COMMON IS THE USE OF AM?

Forty-two per cent of Canadians use AM (2). In 1997, four of 10 American adults used alternative medicine therapies; total visits to alternative medicine practitioners have increased by almost 50% since 1990 and exceeded visits to all American primary care physicians (3). The therapies that have experienced the highest increase in use include herbal medicine, massage, megavitamins, self-help groups, folk remedies, energy healing and homeopathy. Americans spent \$27 billion on alternative therapies in 1997 (3). Users of AM tend to be better educated, with a poorer health status and a more holistic orientation to health. They use AM not so much because of their dissatisfaction with conventional medicine but largely because they find these health care alternatives to be more congruent with their own values and beliefs toward health and life (4).

In 1994, 11% of parents in Quebec reported having used AM for their children (5). Chiropractic, homeopathy, naturopathy and acupuncture were used most frequently. A systematic review of AM use in children showed that the prevalence of use is variable (9% to 70%) (6), and the rates of use are highest in certain subgroups (eg, children with arthritis, cancer and cystic fibrosis) (7).

HOW DO PAEDIATRICIANS FEEL ABOUT AM?

Paediatricians are becoming more open to AM. About 50% of paediatricians surveyed by the Michigan Chapter of the American Academy of Pediatrics indicated that they would consider referring a patient for complementary medicine (CM) and AM treatments such as acupuncture, massage therapy or biofeedback (8). The majority of the doctors surveyed (83.5%) believed that some of their patients were using some form of CM or alternative therapy, but discussions about CM and AM were generally initiated by either parents or the children, not by the physicians. Most of the paediatricians surveyed also expressed an interest in learning more about alternative therapies through continuing medical education courses. And 37% of the paediatricians questioned reported using some form of AM themselves (8).

WHERE DO PATIENTS FIND INFORMATION ON AM?

Many patients consult their own doctor or AM health care providers, such as naturopaths, herbalists, chiropractors, homeopaths, and practitioners of Chinese or Ayurvedic medicine, about AM. Some patients consult pharmacists or seek information in libraries, bookstores and health food stores. Patients and physicians search the Internet for help about issues concerning AM. Information may be found on websites, and in e-mail lists, chat groups and file archives. The websites may give access to databases, publications, parent support groups, AM specialty interest groups, commercial sites and AM practices. The quality of information obtained at many of these sites is a concern for health professionals because the Internet does not require any control over the accuracy of information, or the use of an editorial board or peer review. Many sites turn out to be fronts for manufacturers or glorified online order catalogues.

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WHAT ARE RELIABLE SOURCES ON THE INTERNET FOR INFORMATION ABOUT AM?

Internet resources that attempt to provide objective information, and satisfy the needs of both patients, and health care workers and physicians are listed below. This list is by no means comprehensive, but it is a useful starting point, and accessing these sites will lead to many other AM websites.

Metadirectories

The following metadirectories are websites that offer hyperlinked listings of AM websites.

The *Alternative Medicine Home Page* <www.pitt.edu/~cbw/altm.html> provides information about AM with access to databases, Internet resources, mailing lists and government resources. This is a good starting site.

The *Rosenthal Center for Complementary and Alternative Medicine* <cpmcnet.columbia.edu/dept/rosenthal/> site is a professional research resource with listings that include research databases, academic centres, government sites and electronic journals. Personal resources such as mailing lists, anecdotal information and advice pages are clearly categorized. Linked sites listed on this web page have been selected either for their uniqueness as an information resource or because they provide links to many more resources. Promotional and commercial sites have generally been excluded unless they provide impartial information resources.

The site *Alternative Medicine Health Care Information Resources – McMaster University* <www-hsl.mcmaster.ca/tomflem/altmed.html> offers access to general resources on AM on the World Wide Web. Links to pages are inclusive or encyclopedic in nature. Each link offers access to multiple AM topics. The links to inclusive resources are followed by a list of very specific resources on single topics. This is an excellent site to access initially and has many appropriate hyperlinks.

The site *National Center for Complementary and Alternative Medicine – NCCAM – National Institutes of Health – NIH* <nccam.nih.gov/> is sponsored by the Office of Alternative Medicine established in 1992 as a part of the National Institutes of Health. NCCAM was established in 1998 to "facilitate the evaluation of alternative medical treatment modalities" (9) to determine their effectiveness. NCCAM conducts and supports basic and applied research and training, and disseminates information on CM and AM to practitioners and the public. It provides technical assistance in research education, "facilitates networking between experts in complementary and alternative medicine and research methods, and brings together researchers to prepare grant applications" (9). NCCAM holds regular meetings with the United States Food and Drug Administration to enlist its cooperation in re-evaluating current rules and regulations governing research about devices and their use, acupuncture needles, herbs and homeopathic remedies. NCCAM also corresponds with many alternative medical organizations,

providing them with information about research support and development.

The site *Complementary Health Studies – University of Exeter, United Kingdom* <www.ex.ac.uk/~prmaggis/lib/sschs.html> provides a list of several databases and highlights specific subject areas such as reflexology and homeopathy, as well as directories and resources. It also provides access to *FACT-Focus on Alternative and Complementary Therapies* <www.ex.ac.uk/FACT/>, a review journal that aims to present the evidence on CM in an analytical and impartial manner. It is written by research staff within the Department of Complementary Medicine, Postgraduate Medical School, University of Exeter, Exeter, United Kingdom. Contents pages from past issues are accessible here.

The visitor to the site *Alternative Health News Online* <www.altmedicine.com/> is welcomed with the statement "Be aware that alternative health and healing covers everything from pure hogwash to promising and proven therapies". The statement is followed by handy hints to help the consumer evaluate alternative medical approaches (eg, "be skeptical, but open-minded" and "although anecdotal evidence may be valid, look for scientific evidence that a procedure works"). As well as daily news updates, diverse online resources are collected under separate sections. For example, the Diet and Nutrition page links to a *Consumer Reports* review of the top 10 herbs that can heal and the big bad five that can harm.

Databases

Database sites allow users to search for articles on specific topics about AM.

Alt-Health Watch <www.softlineweb.com/althealth> is a full text database of periodicals, peer-reviewed journals, academic and professional publications, magazines, consumer newsletters and newspapers, research reports, and association newsletters focused on complementary, alternative and integrated approaches to health care and wellness. *Alt-Health Watch* provides in-depth coverage on both professional and consumer levels across the full spectrum of more than 200 therapies, modalities and perspectives addressed by integrated medicine. Free text searching and complete indexing make *Alt-Health Watch* easy to use. A search on a topic will indicate the source of an article, eg, a peer-review journal versus a newsletter.

The International Bibliographic Information on Dietary Supplements (IBIDS) <odp.od.nih.gov/ods/databases/ibids.html> is a database of published, international, scientific literature on dietary supplements, including vitamins, minerals and botanicals. IBIDS is produced by the Office of Dietary Supplements at the NIH to assist the public, health care providers and researchers to locate credible, scientific literature on dietary supplements. IBIDS was developed and is maintained through an interagency partnership with the Food and Nutrition Information Center, National Agricultural Library and the Department of Agriculture in the United States.

The IBIDS database contains more than 300,000 scientific citations and abstracts. Due to copyright laws, IBIDS cannot provide full articles on the World Wide Web. However, it provides a journal list of more than 1500 publications with links to websites where users may order full journal articles. If desired, users can search only peer-review journals.

Southwest School Of Botanical Medicine – Plant Abstracts <chili.rt66.com/hrbmoore/Abstracts/Abstracts.html>. These abstracts of research articles from the past 10 years include predominantly European and Asian plants. Most of the abstracts are from foreign medical or pharmacological journals, and include both human and animal research. Many herbal medicines are poorly researched, but this site provides an alphabetical listing of plants that have received some investigation.

Fraud and quackery sites

The fraud and quackery sites that follow include pages that attempt to combat health-related frauds, myths, fads and fallacies.

Quackwatch, Inc <www.quackwatch.com/> is a non-profit corporation with a primary focus on monitoring

REFERENCES

1. Berkenwald A. In the name of medicine. *Ann Intern Med* 1995;128:246-50.
2. CTV/Angus Reid Group poll. Use of alternative medicines and practices. Angus Reid Group, Inc, 1997. <www.angusreid.com/pressrel/alternat.htm>
3. Eisenberg DM, Davis RB, Ettner SL, et al. Trends in alternative medicine use in the United States, 1990-1997: results of a follow-up national survey. *JAMA* 1998;280:1569-75.
4. Astin JA. Why patients use alternative medicine: results of a national study. *JAMA* 1998;279:1548-53.
5. Spigelblatt L, Laine-Ammara G, Pless IB, Guyver A. The use of alternative medicine by children. *Pediatrics* 1994;6:811-4.
6. Ernst E. Prevalence of complementary/alternative medicine for children: a systematic review. *Eur J Pediatr* 1999;158:7-11.
7. Kemper KJ, Cassileth B, Ferris T. Holistic pediatrics: A research agenda. *Pediatrics* 1999;103:902-9.
8. Sikand A, Laken M. Pediatricians' experience with and attitudes towards complementary/alternative medicine. *Arch Pediatr Adolesc Med* 1998;152:1059-64.
9. Office of Alternative Medicine. <nccam.nih.gov/nccam/about/general.shtml>

Internet addresses are current at the time of publication.

quackery-related information. Founded by Dr Stephen Barrett in 1969, its activities include investigating questionable claims, answering inquiries, distributing reliable publications, reporting illegal marketing, improving the quality of health information on the Internet and attacking misleading advertising on the Internet.

The site *Health Care Reality Check* <www.hcrc.org/index.html> provides access to *The Scientific Review of Alternative Medicine* <www.hcrc.org/sram/index.html>, a peer-reviewed medical journal dedicated exclusively to evaluating AM. The site has a news section with announcements about health fraud and an online encyclopedia of articles about AM. There is also a dictionary of almost 1200 metaphysical healthcare methods.

CONCLUSIONS

Many adults and children use AM in addition to traditional therapies to treat various medical conditions. Family physicians and paediatricians need to keep up with information about these alternative therapies. The Internet provides unprecedented ease of access to information about AM. Reliable and objective AM websites are available, and this article reviewed examples of such sites.