

## Evidence-based complementary (and alternative) medicine on the Internet

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*Overview of evidence-based resources to complementary and alternative medicine (CAM), covering specialist centres, databases, journals, information collections and clinical trials.*

### Current situation

If you have used the Internet to find information on complementary and alternative medicine (CAM), you are not alone. As the general public increasingly rely on the Internet for conventional health information, there is a reflected desire for information on other approaches to health. For example, recent figures demonstrate that the National Centre for Complementary and Alternative Medicine Web site <http://www.nccam.nih.gov> receives over 600,000 hits per month.<sup>1</sup> This is a US-based site but it is unlikely that the situation in the UK is very different.

However, finding reputable information is not a simple matter. There are two main reasons for this. The first problem is related to lack of an agreed definition for CAM. It is comprised of a diverse range of different disciplines, practice and even philosophies. A spectrum of therapies from the widely used and relatively accepted (e.g. osteopathy, acupuncture) to those for which there is limited research (e.g. crystal therapy, dowsing) can be considered to be complementary or alternative. The House of Lords Select Committee on Science and Technology addressed this issue and proposed three basic categories based on evidence, use and the extent to which the practice is regulated. The full report <http://www.publications.parliament.uk/pa/ld199900/dselect/ldstech/123/12301.htm>, including evidence from a wide range of organisations and individuals, makes for interesting reading on the current state of evidence and research in CAM in the UK.

The second problem in finding reliable information is the huge

number of Web sites addressing CAM, many of which are commercial sites or those based on personal anecdote. The number of hits obtained using the search term 'alternative medicine' in a general search engine (Google) is in excess of 800,000, while using the term 'complementary medicine' results in approximately 150,000 hits. But searching for information on a specific therapy is even more of a problem. Over a million Web sites were listed for 'acupuncture', a situation mirrored for 'chiropractic'.

So how do you make sense of all this information and where do you start looking? Although there is a huge amount of information, it is possible to navigate a way through this using key Web sites that lead to other resources.

### Starting points

Comprehensive lists of resources for health professionals and consumers can be found on the Centre for Integrative Medicine Web site <http://www.compmed.umm.edu>. This is an interdepartmental centre within the University of Maryland School of Medicine which aims to evaluate the scientific foundation of complementary medicine and to integrate evidence-based complementary medical therapies and approaches into patient care. 'Complementary Medicine Resources for Health Professionals and Researchers' is a PDF file which can be accessed at <http://www.compmed.umm.edu/Resources.html>. The file includes hypertext links to a wide range of resources including guidelines, academic research organisations, professional journals, and news sites. At 31 pages long, one is almost overwhelmed with information but the section on evidence-based

resources and databases is particularly useful. Their 'Consumer Resources in Complementary Medicine on the Internet' resource is a similar PDF document but is aimed at patients and consumers who are considering CAM treatments <http://www.compmed.umm.edu/Consumer.html>. Again a very comprehensive list has been produced, but non-health professionals are likely to need some guidance on where to start for their specific information need.

The University of Maryland also hosts the Cochrane Collaboration Complementary Medicine Field <http://www.compmed.umm.edu/cochrane/index.html>. This was established in 1996 to help promote and facilitate the production of systematic reviews in topics such as acupuncture, massage, chiropractic, herbal medicine, homeopathy and mind-body therapy. Systematic reviews are widely promoted as providing particularly robust evidence on the effectiveness or otherwise of interventions. The activities of the Field include: maintaining and updating the CM registry of trials (randomised controlled and clinical controlled trials); assisting reviewers doing CM reviews; providing references for all Cochrane Collaboration CM reviews; maintaining a registry of reviews; and refining literature search strategies for identifying CM literature. Free access to the Registry of trials which currently lists 6500 randomised or controlled clinical trials is available at <http://www.compmed.umm.edu/cochrane/registry.html>.

A PDF file listing Cochrane CM reviews both completed and underway is also available via a link from the CM Field site. While useful as a

reference, this document was last updated in February 2002 and it is probably worth checking for more recent information on the Cochrane Library itself. The Cochrane Library is now freely available via the National electronic Library for Health (NeLH) Web site <<http://www.nelh.nhs.uk/cochrane.asp>>.

Also on NeLH, the 'Hitting the Headlines' service often addresses CAM issues as a quick browse of the archives will demonstrate <<http://www.nelh.nhs.uk/hth/archive.asp>>. Staff from the NHS Centre for Reviews and Dissemination (CRD) at the University of York provide a rapid assessment of the original research behind health-related news stories and evaluate how accurately the journalists have reported the findings of the research.

Another starting point is the Rosenthal Center for Complementary Medicine <<http://www.rosenthal.hs.columbia.edu>> which also provides a comprehensive online list of links to relevant databases. Entries are categorised, for example by therapy modality <<http://www.rosenthal.hs.columbia.edu/Databases.html#2>>. However, although the list is comprehensive, many of the links are to information pages rather than directly to the databases.

Another key US site is the National Center for Complementary and Alternative Medicine (NCCAM) <<http://nccam.nih.gov>>, one of the 27 institutes and centres that make up the National Institutes of Health (NIH). It was established in order to support rigorous research on complementary and alternative medicine, to train researchers in CAM, and to disseminate information to the public and professionals on which CAM modalities work, which do not, and why.

In the UK, the Research Council for Complementary Medicine (RCCM) Web site <<http://www.rccm.org.uk>> also aims to promote evidence-based practice in CAM. The Web site provides links to abstracts of relevant Cochrane reviews as well as supporting researchers working in the CAM field by providing information on funding and supporting development of a network (CAM Researcher Network – CAMRN). This is also the home of the CISCOM database (see below).

## Databases

'Alternative and Allied Medicine Database' (AMED) was established in 1985 by the British Library's Medical Information Centre. It contains in excess of 65,000 references and scans 600 journals for references to complementary therapy. It also contains references for physiotherapy, occupational therapy, rehabilitation, and podiatry. Access is restricted although it can usually be arranged for health professionals and students via health or academic library services. In contrast, 'CAM on PubMed' (Medline) <<http://www.nlm.nih.gov/hccam/camonpubmed.html>>, developed jointly by NCCAM and the National Library of Medicine, is available free of charge.

Searching for CAM studies on Medline has proved problematic due to lack of relevant MeSH (indexing) terms,<sup>2</sup> but help is at hand. 'CAM on PubMed' offers a way to search Medline for articles by limiting your search to a special CAM subset. The Web site also provides help, FAQs and sample searches. Alternatively, a guide on searching for CAM on Medline is available at <<http://www.bastyr.edu/library/resources/researchguide>>. Produced in 2002, it will need to be updated in the near future to keep pace with Medline developments, but it does provide some practical hints.

The 'Centralised Information Service for Complementary Medicine' (CISCOM) is a specialist information service based on a database produced by the RCCM <[http://www.rccm.org.uk/ciscom/CISCOM\\_intro.asp](http://www.rccm.org.uk/ciscom/CISCOM_intro.asp)>. It contains more than 80,000 references on complementary medicine including sociological and psychological studies. It combines data from a wide-range of sources including in-house citation tracking. A specialist complementary medicine thesaurus has recently been developed in order to enhance the indexing procedure. A small charge is made to cover search costs.

## Specialist databases

A range exist of which some address specific diseases and conditions such the 'Arthritis and Complementary and Alternative Medicine Database' (ARCAM) and the 'Complementary and Alternative Medicine and Pain Database' (CAMPAIN) both at

<<http://www.compmcd.umm.edu/Databases.html>>.

## 'HerbMed'

<<http://www.herbmed.org>> is a specialist herbal database that provides hyperlinked access to the scientific data underlying the use of herbs. It provides an evidence-based information resource for professionals, researchers and the general public, and contains more than 100 evidence-based reviews of herbal therapies.

For homeopathy go to the 'Hom-Inform Database' <<http://hominform.soutron.com/homqbe1.asp>> which contains more than 17,000 references based on the contents of the Faculty of Homeopathy library based at the Glasgow Homoeopathic Hospital. The database is free to access but a range of literature will be retrieved (including case studies and proving articles) and the user will need to appraise the quality of any studies.

## Journal links

Selected journal links can be found on the RCCM site <[http://www.rccm.org.uk/static/Links\\_CAM\\_Journals.asp](http://www.rccm.org.uk/static/Links_CAM_Journals.asp)> while MedBioWorld provides a large number of electronic links to complementary and alternative medicine journals <<http://www.medbioworld.com/med/journals/complementary.html>>. The former site includes brief descriptions of the journals, while MedBioWorld provides a simple alphabetical list. In both cases, the links are to the publisher's page and in most cases a subscription is required to access the articles.

## Collections of information

The *BMJ* has a number of specialist collections consisting of articles published in the *BMJ* since 1998 on particular topics. The CAM collection is at <[http://bmj.com/cgi/collection/complementary\\_medicine](http://bmj.com/cgi/collection/complementary_medicine)>. Although more useful for current awareness than as a source of evidence, often methodological issues of trials and reviews are addressed in the electronic responses section and can be informative in their own right.

Published monthly, both in print and on the Internet, *Bandolier* gathers the best evidence about CAM (generally systematic reviews),

updates the evidence as it becomes available, provides an interpretation, and makes it more accessible. Currently, there are more than 120 summaries on the effectiveness of complementary therapies for specific conditions. Summaries are categorised into herbal and other supplements, acupuncture, homeopathy, massage and safety concerns <<http://www.jr2.ox.ac.uk/bandolier/booth/booths/altmed.html>>.

## Information on clinical trials in progress

Finally, to check on the developing evidence base in CAM, the NIH provides a complete listing of all trials they have funded <<http://www.clinicaltrials.gov>>. In order to find the trials you need to search under the keyword 'Alternative Medicine'. NCCAM also provides summaries of ongoing clinical trials <<http://nccam.nih.gov/clinicaltrials/>> as well as information on research grants <<http://nccam.nih.gov/research/announcements/index.htm>> and research centre programmes <<http://nccam.nih.gov/training/centers/index.htm>>. The Department of Health (UK) has produced the 'National Research Register' <<http://www.update-software.com/National/>> which includes details of a number of ongoing trials in CAM in the UK.

## Summary/conclusions

The Internet is proving to be a very valuable resource in an area such as CAM, where practitioners and practices are diverse and scattered. A number of extremely good sources of evidence are available electronically although some basic knowledge of CAM is required in order to make full use of those that are available. Finally, CAM is a field that has more than its fair share of commercial and disreputable sites, so careful evaluation of the origin of any information is crucial.

## REFERENCES

1. Beckner WM, Berman BM. *Complementary Therapies on the Internet*. Edinburgh: Churchill Livingstone, 2003.
2. Richardson J, Jones C, Pilkington K. Complementary therapies: what is the evidence for their use? *Prof Nurse* 2001; 17:96-99.

## Building knowledge communities in the National electronic Library for Health (NeLH)

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### *How NeLH Specialist Libraries are developing their communities of practice*

The primary aim of the NeLH Specialist Libraries programme is to organise special knowledge collections based on the core content of the NeLH. This common knowledge core consists of a range of high quality, regularly updated resources such as the Cochrane Library, Clinical Evidence and guidelines from the National Institute of Clinical Excellence (NICE). NeLH has further strengthened this common core of knowledge by developing databases of care pathways, a guidelines finder, and information zones to support key NHS priorities. A resource management system is being developed that will create the feeling for the user that they are relating to a single source of knowledge, even though the specialist library or the search engine is pulling knowledge from a number of different sources.

However, it is not just the production of knowledge, but its mobilisation and localisation that are required to put research into practice.<sup>1</sup> Specialist libraries are led by health care professionals, actively utilising the expertise of experienced information scientists, as part of the National Knowledge Service.<sup>2</sup> A core part of their work will be to encourage and enable their communities to participate in improving the mobilisation, localisation and utilisation of knowledge within their subject area.

## Stages of engagement

Recent research undertaken for NeLH identified a number of development stages for Web-based communities of practice.<sup>3</sup> The findings of this study have been analysed against Specialist Library

development plans, and relevant activities identified and shared with other teams. Stages identified included:

### *Potential*

The main activity of the 'potential' stage of community building was identified as being that of connecting individuals. Within the NeLH communities, these activities include contacting and engaging with stakeholders and users, setting up high level reference groups, and forming relationships with other specialist teams and with the core NeLH team.

### *Building*

At the 'building' stage, communities carry out activities to learn about each other, share experiences, build common vocabularies and collect a repertoire of stories – providing memory and context. Activities being carried out by communities at this stage include the development of contacts databases, mapping specialists and activists in the field, identifying common questions and resource types in their domain, agreeing classification schema, and providing comments facilities in response to policy documents and reports.

### *Engaged*

Activities that characterised the 'engaged' stage involved gaining trust, loyalty and commitment within the community, developing outreach and support services to new members, providing community stories and involving members in an active contribution to the knowledge base. Fewer specialist library teams have reached this stage of development, but some examples included gaining active commitment from stakeholder and multidisciplinary groups, and developing special Web site areas