NURSING ON THE NET

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Small computer networks, called Local Area Networks (LANs) and ones connected to many sites, Wide Area Networks (WANs) are an increas-ingly important means of communication. One example of a LAN might be a novell network of 30 PCs at a hospital. Examples of WANs include BITNET, a world-wide network of mainly IBM computers, and the internet, the biggest world-wide network, and the fastest growing communication system in the world.

If you want to talk to a colleague who is 5,000 miles away, or read an article in a library in another continent, or see various documents, stored in many countries, about a specialised subject, then the internet may be just what you are looking for.

Increasingly nurses are using both local and international computer networks to communicate with each other and exchange information. There are a lot of services available that may help, but new-comers find it difficult to locate them, therefore some services relevant to nurses are presented here.

Email and Email Lists

If your computer is connected to a network, you can send electronic messages, called email (electronic mail) to other people attached tothe network, which might be a collection of computers at one site, or linked to computers over a large geographical area. Staff in the hospital could send email rather than memos, which is much faster, and involves no paper copy. Communicating over WANs is potentially much more powerful. You might use email on a WAN to (say) talk to collaborators in a nursing research project in several countries.

The program you use to send and receive email, called a mailer, will vary depending on your site. There are many different mailers just as there are several different word-processors. However, essentially what they do is allow you to type in a message and send it to an email address, or read messages sent to your email address. An email address typically looks something like cudma@csv.warwick.ac.uk, where the user-code or name cudma is followed by the site address, here csv.warwick.ac.uk. The @ symbol is used to separate the user-code from the address. Some sites use more intuitive names like D.M.Anthony@csv.warwick, ac.uk.

You may also email a group of individuals. Such an email list is usually a list of people who wish to discuss a specialised topic. Email lists are often managed by an automated listserver.

An example is NURSENET. If you wanted to subscribe to NURSENET you would send a message to the listserver at listserv@vm.utcc.utoronto.ca with the simple message: SUBscribe NURSENET Yourfirstname Yourlastnamewhere Yourfirstname Yourlastname is your own name, e.g. I would say: SUBscribe NURSENET Denis Anthony.

There are other commands you can send to most listservers, for example you can un-subscribe, or ask for no mail while you are on holiday, or get a list of subscribers etc.

Listservers are often automatic, and the above message would subscribe me to NURSENET with no human intervention. Some lists are maintained manually by individuals, for example midwife@csv.warwick.ac.uk is one I run for midwives. Where this is the case there is usually an administrative email address, mail to this address only goes to the maintainer; you use this to get subscribed etc. in this case midwife-request@csv.warwick.ac.uk.

USENET News

Where the number of people who wish to discuss a topic or share information becomes large (more than a few hundred), email becomes inefficient. Instead the information may be placed on a newsgroup. Articles may be sent to the newsgroup, and people can subscribe to specialised groups to read the articles, or send their own. Like email USENET requires some form of network access, most users of USENET are on the internet, but the news can be sent over other networks. Sites receive a news-feed which may be up to several thousand specialised newsgroups, or some relevant subset. There are newsgroups for nursing.

If you have a USENET feed you can go to sci.med.nursing. If you have no news feed you may be able to persuade your systems administrator to have one, otherwise you can use the USENET gateways at Imperial College or Michigan State University.

The Internet

The internet is a particularly powerful network which originally linked a few military sites, then an increasing number of academic sites in the USA and Europe, and now links most universities in the Western World and an increasing number of commercial sites.

Accessing Information on the Internet

Initially the internet was used almost exclusively by scientists and engineers, but in recent years other disciplines have been building resources on the network. There are several established methods of placing information online, and of accessing this information. The most important methods are given below.

Accessing the services will vary from site to site, depending what software you have. If you are unsure how to access a particular service you should ask your local administrator. You will often find that you can email a special user postmaster at your site or postmaster@site at some remote site (at Warwick this would be postmaster@warwick.ac.uk). It is not the job of the postmaster to tell you how the systems are configured, or what to do to run certain services. However they often do know, and if they don't they should be able to refer you to some-one who can. If you have no local support you can contact anthondm@sun1.bham.ac.uk and I will do my best to advise you.

Telnet

The computers on the internet may be accessed by logging in to them using a facility called telnet. Telnet allows you to log in to a computer anywhere on the internet as if it were a computer directly attached to your terminal. To use telnet the remote site should have their setup to allow telnet access (most do) and you usually need an account on their system. It is very useful (e.g.) if you are at a conference in London, and want to check your email at your university in New York. You would telnet from London to your account in New York using your account name and password for the New York account.

Some sites allow any users to telnet in to a restricted service. Then you need no user-code or password, or there may be a user-code and/or password, but it is publicised. This is useful to allow you to access services that are not available on your site. Some telnet sites useful for nurses are given in Appendix 2.

FTP

Files on a computer can be down-loaded to your local computer using ftp (File Transfer Protocol). This is like telnet, but instead of logging in to an account to execute programs, read mail etc. it merely allows you to copy files from one computer on the internet to any other computer on the internet.

Like telnet, you can log in to your own account on a remote system, which is very useful if (e.g.) you are at a conference and forgot to bring your paper with you. But you can also log in anonymously, i.e. if you have no account. Anonymous ftp access is typically permitted to allow you to access public archives, and normally you use the user-code ftp and type in your email address as a password (some sites use the user-code anonymous instead).

Gopher

Gopher allows information which exists on many different sites throughout the world to be linked together into one system. This is especially useful to present information about a particular subject, and means the person accessing the information need only know very simple commands, and does not need, for example, to know where the information resides, or how to access it. The information is accessed via menus, and can include images and sound. Gopher needs internet connectivity. There are gopher services for nurses, see Appendix 2.

World Wide Web

The World Wide Web (WWW, or just The Web), is similar to gopher, but the information is displayed as a hyper-text document, where you may follow cross references to other material by (typically) clicking a mouse button on highlighted words. It can also use graphics and sound and other multi-media information. There is a WWW nursing service, see Appendix 2.

This document was written for the Web, and you will note that there are underlined phrases and words in it. If you read it on the Web then those underlined sections are hyper-text links, which means that if you access the link (typically by clicking on the link with a mouse) then you connect to another document or service, which may be at Warwick (where this document was written) or anywhere else on the Web. For example clicking on this will take you to CERN in Switzerland, where the WWW was invented.

Netiquette

As the net is quite new to most users, it can be bewildering at first. A common fear is making a fool of yourself. You may wonder at what level to talk to people who you do not know, and about whom you know typically very little. The phrase netiquette has been coined to describe the usual informal rules of communicating.

You will find that in general people are much more relaxed and informal on the net, and the formal letter style is not often used. Most people are on first name terms, and many communications are very short and to the point.

You will find if you do not follow the netiquette you will make some people angry, causing what are known as flames to be sent. These are vitriolic email (or similar electronic) messages where you are shot down for expressing your views in an inappropriate fashion. You will avoid this if you follow the following simple guidelines:

- Irony is not easily understood, especially by people whose first language is not English. Either avoid it or place smilies, i.e. the letters:-) to show you did not mean it to be taken seriously.
- Email is immediate, unlike a letter which you write, think about, decide not to send, and re-write. Never reply to an email message while you are angry. Wait for an hour and then send it. You will probably send a more restrained email rather than one which you will regret.
- Do not send blatant advertisements to non-commercial services.
- Do not belittle other users on the basis that they are technically naive.
- Only cross-post a message (i.e. send it to several email lists or newsgroups) if the message is really relevant to all the recipient lists/groups.

Conclusion

Electronic communication is usually fun, and the people you speak to on the net are generally helpful. This may change as the pioneering image starts to fade. Nurses are only just starting, so the friendly milieu will probably carry on for a while. Indeed nurses have been very slow to use the internet, but there are resources available for any nurse who has a network connection, especially if they are on the internet.

There will be a massive increase in use of the internet by nurses if they are to catch up with other professional groups.

Appendix 1

URLs

Much of the information about the internet is available on the WWW, gopher or ftp. As WWW itself can get information from all three of these services, a common address is defined for information called a Uniform Resource Locator or URL. The URL can be used with a WWW program to fetch the item. The program mosaic for example allows you to specify a URL to fetch by clicking on the File menu, and then clicking on Open URL.

If your site has either the "mosaic" program or "cello" or any program capable of accessing the WWW ("viola", "lynx", "www" etc.) then you may use the program to connect to what is known as a URL (Uniform Resource Locator), which is the address of a document on the "web" (the web is composed of all the WWW services on the internet). Any document on the WWW can be accessed by asking for the appropriate URL. Usually you would not need to know the URL, but would click on a "link" in a document which contains the information needed to locate that document.

You may find using the URL is a fast method of accessing a document however. The URL for the midwifery service is "http://www.csv.warwick.ac.uk:8000/midwifery.html". This may look daunting, but all it really means is that the document is stored at Warwick University (www.csv.warwick.ac.uk is the university address) at a particular location (8000) and has the name "midwifery.html" (most documents have a name ending in "html" which means it is written as a hyper-text document). If you are using mosaic (the most common graphical WWW program) you can click on a pull-down menu and ask to open a URL. For mosaic on UNIX systems you click on "File" then "Open URL", then type in the URL, on other systems it may be slightly different, "www" and "lynx" for exmple both have the "g" command which then accepts a URL), opening the URL then automatically fetches the document for you.

Three examples of how URLs might look are below, all of these are real ones used in the other appendices:
http://www.csv.warwick.ac.uk:8000/
or
gopher://gopher.csv.warwick.ac.uk:10001/11/email-lists.
or
file://ftp.warwick.ac.uk/pub

The first one gets a document from a WWW service, the second from a gopher service and the last from an ftp site. The only thing you need to know is that if you see something like this, you can use a WWW program to access the information.

Appendix 2: Services for Nurses

The following are examples of services you can access. Some methods of getting through to them are offered, but you may need to talk to your local computer support as the programs used to access services vary according to your local setup.

Most of the following are available via WWW, and the URLs are given so if you have a WWW browser like mosaic, you can use it to access the services without needing to locate other programs.

Email and Email Lists

There are several for nurses, you can see details on NURSE at URL http://www.csv.warwick.ac.uk:8000/#email-lists of these lists.

- GradNrse Graduate Nurses List. To join GradNrse send mail to LISTSERV@KENTVM.KENT.EDU with SUB GradNurse e.g. SUB GradNrse Denis Anthony.
- MIDWIFE for midwives. To join or leave the list send email to midwife-request@csv.warwick.ac.uk asking to be placed on the list.
- NURSE-UK for nurses interested in UK issues. To join or leave the list send email to nurse-uk-request@csv.warwick.ac.uk asking to be placed on the list.
- NURSENET discourse about diverse nursing issues. To subscribe, send the following command in the body (the body is the actual message, which is kept separate from the address, rather like a letter is separate from the envelope) of a mail message to: LISTSERV@VM.UTCC.UTORONTO.CA/ SUBNURSENET in the body of the message.
- NRSING-L Nursing Informatics List. To join NRSING-L send mail to listproc@nic.umass.edu with SUB nrsing-l in the body of the message.
- NURSERES Nurses Research List. To join send mail to LISTSERV@KENTVM.KENT.EDU with SUB NURSERES in the body of the message.
- SCHLRN-L School Nurse List. To join send mail to LISTSERV@UBVM.CC.BUFFALO.EDU with SUB SCHLRN-L in the body of the message.
- SNURSE-L for undergraduate nursing students. To join send mail to listserv@ubvm.cc.buffalo.edu with SUB snurse-l in the body of the message.

USENET News

The newsgroups for nurses include:

- sci.med.nursing. The USENET newsgroup dedicated to nursing issues.
- bit.listserv.snurse-l Student nurse email list. This is a listserver group, i.e. the email sent to list snurse-l are relayed to this group.

Telnet

Most sites do not allow anonymous telnet access. However some useful ones that do are:

- rsl.ox.ac.uk Oxford University. telnet to rsl.ox.ac.uk, login as lynx, this gives you access to the WWW service. This is useful if you have no WWW client (a client is a program that accesses the information service).
- info.brad.ac.uk Bradford University. telnet to info.brad.ac.uk and login as info. This gives you access to the gopher service, useful if you have no gopher client.

There are telnet sites that you need pay to get a code for, but some allow you to login as a trial user. Nursing sites that allow this include:

- novalink.com Nursing Network, telnet to novalink.com and login as info.
- stti-sun.iupui.edu Sigma Theta Tau Library, telnet to stti-sun-iupui.edu using visitor as user-code and password.

FTP

There are no known nursing ftp sites. General purpose and specialised ftp services are available. Warwick have an FTP service that archives the GNU software e.g. To see it ftp to ftp.warwick.ac.uk and login using ftp as user-code and your email address as password.

Gopher

Nursing gophers include:

- NURSE gopher to gopher.csv.warwick.ac.uk on port 10001. To do this say something like (quite what works at your site may be slightly different, ask your local administrator) gopher.csv.warwick.ac.uk 10001. This will log you onto NURSE at Warwick University.
- NIGHTINGALE. To do this say something like gopher nightingale.com.utk.edu. This will log you onto NIGHTINGALE at Tennessee University.

World Wide Web

Currently the only nursing WWW service is NURSE. The NURSE WWW is accessed something like mosaic http://www.csv.warwick.ac.uk:8000/.

If you are reading this document in the Libraries for nursing bulletin or on some service other than WWW then you could try accessing it on the WWW by using a WWW client such as mosaic (often WWW clients like mosaic are called browsers), and ask for the URL (see Appendix 1 for a description of URLs) http://www.csv.warwick.ac.uk:8000. This will place you on the NURSE WWW service at Warwick, you will find this article under papers, just click on the link papers.

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He can now be contacted at: INET: anthondm@sun1.bham.ac.uk PHONE: +44 21 414 3158 FAX: +44 21 414 4036 WWW: http://www.csv.warwick.ac.uk/~cudma/
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The information contained in this article was correct at the time of writing but changes occur daily in the world of the internet. Neither the author nor LfN can be responsible for its accuracy at the time of reading.

EVIDENCE BASED HEALTH CARE: THE ROLE OF THE LIBRARIAN

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(This paper is based in part on a seminar presented by Anna Donald, Senior House Officer in Public Health Medicine, John Radcliffe Hospital, Oxford, to the Health Libraries Information Network, Anglia and Oxford Region)

The spiralling cost of health care provision is presenting an increasing problem for health care practitioners. Medical technology is advancing rapidly, and the mass communication of this knowledge through television and other media has heightened public expectations of medicine. Demographic factors such as increased life expectancy and greater capacity for survival contribute to the problem.

The amount of money and other resources invested in health care research has never been greater. However, there is evidence that this research is not being used in practice, resulting in a lack of cost-effectiveness and efficient care, which is to the detriment of both the patient and the tax-payer. One of the main reasons for this is the sheer volume of information available: how can health care practitioners distil this mass into a usable nucleus of information which can then be used as a practical tool?

Evidence based health care, which will here be defined as *the application of research evidence to decision making about health care*, is one potential solution to these problems.

Decisions made by managers and clinicians in the NHS often have far reaching effects on clinical practice and cost to tax payers. Many factors influence these decisions, including:

top down priorities – e.g. government policy or procedures laid down by individual NHS Trusts or other health care providers

professional advice – e.g. from producers of pharmaceutical products or medical equipment

consumer involvement – e.g. level of demand for a particular treatment or level of relevant knowledge amongst consumers