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## COMMENTARY

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# Use of Internet for Obstetricians and Gynaecologists

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Internet is the most powerful source of informations the world ever had. In medicine, the Internet can provide much informations, knowledge, news, updated journal and medical education. Because of its easy to access, Internet become the most popular source of informations in a very short period of time. In the present day, it is essential for doctors and medical students to know how to use the Internet it can be very helpful in providing education and in daily life.

We can look at the Internet in many different ways. In the physical way, the Internet is a huge computer network. The large network results from the connection of many small networks. Each network can communicate to the others by standard protocol called Transmission Control Protocol and Internet Protocol (TCP and IP). This network grow bigger and bigger and spread though out the world. Because the speed of connection is very fast, it looks like there is no border between the countries in the world to communicate through this network "the Internet". Because of this property, the Internet has become a media too. It can transmit the text, radio, picture, telephone, moving picture, and an important issue is that all these media can be interactive !

Moreover, the Internet is like a very big library of the world. This library contains not only books but also other interactive media. The users can also do the business in the Internet, read and send the electronic mail, shopping, entertain, talk to friends and many other things.

## Technical terms usually found in the Internet

**Domain name** : Domain name is the name of each computer that connect to the Internet. In fact Domain name is a four sets of digits such as 201. 12. 240. 31. But the set of digits is hard to remember so they switched them to alphabets, for example, <mahidol.ac.th> is the domain name of Mahidol university computer (ac comes from academic and th comes from thailand).

**Download** : When we command the computer to transfer the file from other computer to ours, we call it "download the file".

**HTML** : Hypertext Markup Language is the form of standard language that use to write the information in the Internet.

**HTTP** : Hypertext Transport Protocol is the standard protocol to transfer the information that was written in HTML.

**IRC** : Internet Relay Chat is a service in

the Internet that users can talk to the others by printing the keyboard.

**ISP :** Internet Service Provider is the one who build the computer network and links it to the Internet and sells the internet service to the users.

**Plug-in :** Plug-in is an extra programme that add on the main one to do some special features. For example, Shockwave plug-in from Macromedia Inc. can help the users to play multimedia programme in the Internet.

**SLIP and PPP :** Serial Line Internet Protocol and Point to Point Protocol are the standard forms of connection between computer of ISP and users through the telephone line. Point to Point Protocol is the new one that upgraded from SLIP to enhance new features such as Internet Phone.

**TCP and IP :** Transmission control protocol and Internet Protocol are the standard forms of transmission between each computer. The logic of using TCP and IP is to connect all the computers together by standard method.

**Upload :** When we command the computer to transfer the file from our computer to keep in the main computer, we call it "upload the file".

**URL :** Uniform Resource Locator is the standard form of order that is used when users want to locate the resource in the Internet. This standard order is in the form of "protocol://host.domain/path/file"

**Web Browser :** Web browser is the special programme that use in browsing the World Wide Web which is one of the most popular service in the Internet. The web browser has the property of HTTP that can read the information written in HTML.

## History of the Internet

The origin of the Internet came from a military concept in the age of "Cold war" between United States and Soviet Union in 1970. The

United States Ministry of Defense had begun to develop a computer communication to use instead of the standard one. The objective is to prevent the loss of communication when some of the pathway of connection was damaged by the war. In the beginning, the network was constructed between the famous universities of the United States and spread out over the country. Finally, the spread of the network get through the world exponentially. Estimated users in the world are about one hundred million and in Thailand are about hundred thousands.

Who own the Internet and who financially support it ? The answer is no one own the Internet but everybody who use it own the Internet. Each one who build up the network look after their network. The connection between networks can be many ways such as telephone line, fiber optic, satellite, etc. The main backbone of the Internet is the high speed cable that was supported by the United States government official such as NASA and National Science Foundation (NSF). The Internet Society, which contains the ISP, is the one who help to supervise the standard and the direction of the Internet.

## Services in the Internet

The important and popular services in the Internet contain

1. Electronic mail
2. World Wide Web
3. File Transfer Protocol
4. Newsgroup

Electronic mail is similar to the mail we use. But the electronic mail is the mail that run in the computer network. The advantage of e-mail is the speed and the cost. Your mail will go to the recipient at nearly the speed of light and cost very cheap. The disadvantage is you have to have a computer that connect to the Internet



before you can use this service. World Wide Web is the new service that become the most popular. The WWW is like a big library that contains many books but we call each book "website". The website can be created by anyone. The first page of website was called "homepage". Each website contains the informations from the developer. The developer can be personal or government official or private organization. Even you can create your own website easily and put it in the WWW. Content in the website will contain the link to another websites so it looks like the web of the spider. File Transfer Protocol is the transfer service in the Internet to move file from beyond such as you can transfer the EpiInfo program from CDC website to use in your own computer. Newsgroup is like a news board that users can intercommunicate and share some news and experience or asking questions. Besides these services, there are many other services that you can find in the Internet such as Internet Phone, etc. Nowadays you can make a call to a home telephone from your computer with lower cost than using normal telephone by the help of software called Net2Phone.

## **How to access the Internet and equipment needed**

The information in the Internet is an electronic data so we must electronically access them. The display of the information will be through the monitor of the computer and we can also print it out. If your office have LAN (local area network) system, you can promptly access the Internet through your LAN. Personally you can access the Internet by connecting to ISP by the telephone line at your home.

The equipment needed for access the Internet

1. A computer with good speed central

processing unit (CPU). At least a Pentium class is needed. But for the better CPU, you can process the incoming data more quickly. For this moment, Chip Pentium MMX, Pentium Pro, Pentium II are on market and they can give you faster speed but in higher cost. The RAM (Random Access Memory) in your mainboard must be enough for the system, 16 MB RAM or more is recommended. The popular operating system is Windows from Microsoft or any other operating system such as OS/2 Warp.

2. Modem (comes from modulation-demodulation). Modem is the instrument that will change the digital signal in the computer to be an analog signal using in the telephone line and change the analog signal from the telephone line to be digital for computer.

3. Data storage such as floppy disk and hard disk.

4. Monitor.

5. Controller such as keyboard and pointing device.

6. Telephone line. The separate telephone line for the Internet is needed. The telephone line will be connected to the Modem and from the Modem to the computer.

Besides the hardware, you need also the software. After setting up the hardware already, the software must be properly installed and set up. The popular softwares for the Internet are Netscape and Microsoft Internet Explorer.

## **General use of the Internet**

Now I think you can understand the Internet and its application clearer. At least you can see that with a computer and a modem you can access to the world's largest information centre. You can read news, read and send mail, search for some information and knowledge, listen to the radio, listen to the music, read a magazine,

ordering a pizza, shopping, even book airplane ticket, etc. At this time if we have complete set of hardware and software we can talk to our friends abroad with real time moving video! If you are interested in any application in the Internet, you can download that file and within a few minutes you can use it.

## Use of the Internet for Obstetricians and Gynaecologists

Besides the general application of the Internet, it also bring revolution to medicine and public health status. As a researcher or general practitioner you can share your experience with others through the Internet. In medical education, there are many websites in the World Wide Web that created from famous medical school that give the multimedia learning experience to the medical students. For general population, there are many websites that give information about the common diseases, special diseases, health promotion, ask questions, etc. In Thailand, we also have our medical websites such as MedNet that developed by Loxinfo Inc.

With this technology in the Internet, now we can visit a patient from beyond. We can make a diagnosis and treatment on line. We called it "Telemedicine". In near future we can even do a surgery from a very far away place such as an expert surgeon in United States can operate a patient in Thailand by using a high speed and reliable cable through the Internet.

For the Obstetricians and Gynaecologists, we can search our updated journal and new knowledge in the Internet. Most of all famous Obstetrics and Gynaecology journals are on line now. New model ultrasound can connect to the Internet and we can consult the questioned cases to the expert through the Internet. If you want to attend a congress or conference, you can apply

electronically. And in near future with the video conference technology, we will be able to attend any famous congress at our home!

## Interesting Websites

In World Wide Web there are large numbers of information that we can get. Sometime we will feel that's "too much", so we can not find anything. There is a technology call "Search engine" that can help the freshly to find the thing they want. Now I will list you some interesting websites and search engines so for the one who just begin and feel confuse with the Internet can begin to surf the Web successfully. I hope all of you will enjoy it.

### Organization

AMA	<a href="http://www.ama-assn.org">http://www.ama-assn.org</a>
CDC	<a href="http://www.cdc.gov">http://www.cdc.gov</a>
FIGO97	<a href="http://www.ics.dk/figo97">http://www.ics.dk/figo97</a>
ISGE	<a href="http://www.isge.org">http://www.isge.org</a>
NCI	<a href="http://www.wicic.nci.nih.gov">http://www.wicic.nci.nih.gov</a>
SGO	<a href="http://www.sgo.org">http://www.sgo.org</a>
Thailand Ministry of Public Health	<a href="http://www.moph.go.th">http://www.moph.go.th</a>

### Medical journal

BMJ	<a href="http://bmj.com">http://bmj.com</a>
Fertil & Steril	<a href="http://www.east.elsevier.com/fert">http://www.east.elsevier.com/fert</a>
Lancet	<a href="http://www.thelancet.com">http://www.thelancet.com</a>
JCO	<a href="http://www.jcojournal.org">http://www.jcojournal.org</a>
Journal watch	<a href="http://www.jwatch.org">http://www.jwatch.org</a>
JRM	<a href="http://www.jreprodmed.com">http://www.jreprodmed.com</a>
Medline	<a href="http://wbi.kfinder.com">http://wbi.kfinder.com</a>
NEJM	<a href="http://www.nejm.org">http://www.nejm.org</a>
Ob-Gyn Online	<a href="http://www.ccspublishing.com/J_obg.htm">http://www.ccspublishing.com/J_obg.htm</a>

### OB-GYN

#### Menopause

[http://sogc.medical.org/sogc\\_docs/common/meno/engindex.htm](http://sogc.medical.org/sogc_docs/common/meno/engindex.htm)



Female Genital Dis and Pregnancy com-  
plication

<http://www.mic.ki.se/Diseases/c13.html>

OBGynNet <http://www.obgyn.net/english/ENGLISH.htm>

OBGYNResouce

<http://www.midcoase.com.ar/prof/medical/resource/obgres.html>

Obstet-Ultrasound

<http://www.home.hkstar.com/~joewoo/joewoo2.html>

Pathology Index

<http://www.medlib.med.utah.edu/WebPath/FEMHTML>

## **Oncology**

CANCERLIT

<http://www.wicic.nci.nih.gov/clinpdq/canlit/gynecologic.html>

Cancernet

<http://www.arc.com/cancernet/cancernet.html>

Oncolink <http://oncolink.upenn.edu>

## **Education**

Medical Student

<http://www.geocities.com/heartland/1756/lounge.html>

General <http://www.kaplan.com>

## **Others**

HIV <http://www.hivinsite.ucst.edu>

CDC (AIDS) <http://www.cdcnac.org>

Help (for AIDS) <http://www.slip.net/~akb/hivhelp.html>

Health <http://www.healthfinder.gov>  
<http://www.mednet.tnet.co.th>

Women Web Lit

<http://www.webmedlit.com/topics/WomenLit.html>

CNN <http://www.cnn.com>

Times <http://www.time.com>

Bangkok Post <http://www.bangkokpost.net>

Golf <http://www.golfweb.com>

Movie <http://www.movieweb.com>

## **Search Engines**

Yahoo <http://www.yahoo.com>

AltaVista <http://www.altavista.com>

Avicenna <http://www.avicenna.com>

Shareware <http://www.shareware.com>  
<http://www.jumbo.com>