

Technology Adaptation by Doctors



Abstract: I have written 8 articles exhorting homoeopaths to adapt to technology; for those who oppose every new development (one should always have a negative side, don't we all turn beasts at times?), I must reiterate technology adaptation implies using our grey cells to perform better, be more productive, spend more time in THE work that we do rather than nitty gritty of doing it. After all, it is Technology Adaptation & not Technology Submission!

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WHAT IS TECHNOLOGY?

Technology is a broad concept that deals with our knowledge and use of arts, tools and crafts and how it affects our ability to control and adapt to our environment. A stricter definition is, however, elusive! Commonest example is use of a complex, multifunction handset for making calls.

WHAT IS ADAPTATION?

Adaptation is adjustment, acclimatization, modification, change based on the circumstances and available resources.

Commonest example is how in this decade itself, most of us have adapted to the use of complex mobile handset or the computer.

Medical science has evolved by leaps & bound (and is evolving on a minute to minute basis) and MEDICINE, per say, has adapted to technology; huge analyzers, scanners, gadgets to diagnose, treat and monitor ailments! It is now time that doctors, especially those in primary care, should adapt to technology in order not just to deliver quality healthcare but also to develop better doctor patient relations. Is it, then, too much to expect that physicians, who continually educate themselves on the latest modalities of treatment and investigations, also integrate the latest improvements in delivering that care? My personal experience with using technology to the hilt including electronic

medical records in my practice has been a step forward for better healthcare for my patients. Technology adaptation does NOT only mean use of computers and Internet. It implies using latest gadgets for examination, utilizing latest investigative tools, maintaining electronic patient records facilitating easy retrieval of concerned data and last but not the least, using 'in' methods of establishing and maintaining good doctor-patient relationship. Most references to "learning" as improvement in medical care imply a commitment to better "clinical judgement" and all continuing education focuses on the same. You rarely come across programs (lectures/ workshops/ seminars) helping the medico imbibe newer skill sets, so important for better clinical practice. History is full of examples of the incumbents of dominant technologies preferring to die than to adapt, and medicine threatens to go the same way, if we practicing doctors do not take steps to avoid repeating the same mistake.

We need leaders to educate students in the area of creation, application and adaptation of technology and for all those who feel that older methods of referring to books is better, let me tell them I recommend adaptation and NOT submission – never to let a machine think for you but be at your command to help you think and perform faster.

Technology Adaptation: The Scope

COMPUTERS – The mention of technology immediately conjures upon image of a computer, rightly so! Computer is inarguably the most significant piece of technology that can make Homoeopathic practice a real treat!

CLINICAL PRACTICE

1. **ELECTRONIC RECORD KEEPING**– In addition of customized Homoeopathic software easily available Microsoft software viz MS Excel and MS Word can be utilized (all discussed elsewhere in this issue).
2. **USING COMPUTERS FOR CLINICAL EXCELLENCE**– Various Electronic Remedy finders, Repertories, Materia Medica(s) and case recorders.
3. **DISTANT CONSULTATION**– With world having become a global village and Indian Homoeopaths respected all over, more and more Homoeopaths are offering distant consultations. Those who are yet to start are wasting precious time. Proper use of any or all of the following goes a long way in getting and managing patients continents away.
4. **E-MAIL**: E-mail is the 3rd major revolution in the field of personal communications in last 20 years, after fax and courier (overnight delivery), e-mail allows near-instant communications with people anywhere, just like phone or fax but unlike fax and phone, which are hypersensitive to distance between two end points, e-mail is insensitive to distance. Second major advantage is multicasting– same message can be sent to multiple recipients, both in India and internationally. E-mail has become the primary communication channel especially for individuals and small businesses as it allows rapid and cost-effective means of international communication.
5. **MOBILE**– Getting symptoms of a patient already under treatment; text messaging advice etc.

6. **VIDEO CONFERENCING**– You need not have your own set up (if net savvy, you may do a chat with a webcam) but can block time at one of the Reliance Web stores and talk while looking at your patient

7. **CUSTOMIZED EDUCATION MATERIAL FOR PATIENTS**– With slight dexterity one can offer customized education pamphlets and earn additional revenue, in addition to gratitude.

8. **VIDEO/ PICTURE FOR REFERENCE**– Clicking picture of skin lesions for future reference and video recording for teaching purpose.

DRUG DELIVERY

1. **BLISTER PACK**– Although very few use this, it ensures better compliance especially in today's jet-age.

2. **THROUGH COURIER**– Same day deliveries ensures medicines reach the consumer and can be used even within the same city.

MEDICAL EQUIPMENT (Minimum, a practicing doctor should have)

1. **OTOSCOPE**– An Otoscope is used to examine the ears. It is an important diagnostic tool to investigate when a symptom involves the ears, especially in a child. With an otoscope, it is possible to examine the outer ear and the middle ear. Portable otoscopes (powered by batteries) are ideal for primary care physicians. Oscopes are often available with ophthalmoscopes as a diagnostic set. Otitis media (if missed in children may be catastrophic as it can lead to meningitis) and otitis externa, are diagnosed with the help of an otoscope. These are also frequently used for examining patients' noses (avoiding the need for a separate nasal speculum) and (with the speculum removed) upper throat.

2. **PEAK FLOW METER**– It is an easy to use, inexpensive, small, hand-held device used to monitor a person's ability to breathe out air. It measures the airflow through the bronchi and thus the degree of obstruction in the airways.

It is an important tool in managing asthma (including cough asthma) and COPD. It measures the patient's maximum speed of expiration or peak expiratory flow rate (PEFR). Peak flow readings are higher in well patients and lower in airways obstruction. Changes in recorded values, we can determine lung functionality, severity of symptoms and treatment options.

3. **GLUCOMETER**- It is a device for determining the approximate concentration of glucose in blood. It is one of the key equipment for home blood glucose monitoring (HBGM) by those with diabetes mellitus. In India it is an important tool in the armamentarium of the family physician. A tiny drop of blood obtained by pricking the skin is applied on a disposable test strip, which the meter reads and uses to calculate the blood glucose level. Result is then displayed in mg/dl or mmol/l.

4. **ECG**- I don't know why many Homoeopaths do not have ECG machines especially since many have worked in ICUs in their formative years. You may not use it for diagnosis but to ensure that the chest heaviness you are treating is not cardiac. Also having your own machine will ONLY make you learn, how to read an ECG. Imagine what figure you are cutting in front of the patient when you do not even look at ECG he/she brings (And patients think '*mera doctor mahaan hai!*')

5. **THERMOMETER**- A large percentage of doctors do not even use thermometers to monitor

patient's temperature. It not only helps in diagnosis, monitoring but also in impressing the clients if you use the latest gadgets like an ear thermometer.

CME- Continuing Medical Education from the comfort of your home and when you wish to! Search what you want on the Internet. Your own www.njh.in is one such portal - worlds 'largest collection of Homoeopathic content online.

TEACHING

1. **VIDEO RECORDING**- Popularized by Dr RAJAN SANKARAN; now followed by several others
2. **SERIAL PICTURES OF PATIENTS/LESIONS**- To demonstrate efficacy of Homoeopathy
3. **MIND BOGGLING POWER POINT PRESENTATIONS**; 35 MM SLIDE PROJECTOR or OHP PROJECTOR is conspicuous by their absence.

ADMINISTRATIVE WORK IN CLINIC- Using MS Excel, MS Word and MS Outlook to its best.

HELP IN DOMESTIC CHORES- Maintaining a list of guests for parties, sending SMSs on festivals, reminder of important days eg birthdays, anniversary. I know of a doctor who sends greetings to his 1500+ patients regularly.

INTERNET (Discussed in detail elsewhere in this issue)

1. Learning
2. Trading
 - i. Buying books / products
 - ii. Accepting payment through credit card
3. Keeping in touch
4. Research (search)
5. Sharing pictures/ data/ files

SHOCKING TELEGRAMS



- ♦ A daughter sends a telegram to her father on her clearing B. Ed exams, which the father receives as: " father, your daughter has been successful in BED."
- ♦ A husband, while he is on a business trip to a hill station sends a telegram to his wife: "I wish you were here." The message received by wife: "I wish you were her."
- ♦ A wife with near maturing pregnancy goes to railway station to return to her husband. At the reservation counter, while her turn came, it was the last ticket. Taking pity on a very old lady next to her in queue, she offered her berth to the old lady and sent a telegram to her husband which reached as: "Shall be coming tomorrow, heavy rush in the train, gave birth to an old lady."

Internet

Abstract: I have observed that many doctors even though sending and receiving e-mails do not use the power of the web. They do not fathom what opportunity they are missing. Everyday I learn something new - courtesy the INTERNET. This article is dedicated to the 'uninitiated' but I am sure will add to knowledge of the regular browsers as well. The new entrants are requested to sit on a PC, open Internet Explorer and get going...! Happy browsing!! - Dr CH ASRANI

The Internet is a global network of interconnected computers, enabling users to share information along multiple channels.

It was developed by the US Dept of Defense for military use National Science Foundation for use by University researchers. Its main purpose was to link together the military, defense contractors and universities in the event of war. Educational Institutions joined in on the Internet Band-Wagon in the early 1980's. Early 1990's, commercial use of the internet started and kept multiplying. Also known as Information Super Highway - think of it as a maze of roads, lanes, highways and bridges. A computer that is connected to the Internet can access information from a vast array of available servers and other computers by temporarily moving information from them to the computer's local memory. The same connectivity also allows that computer to send information to servers on the network and through them to other interconnected computers.

In addition to this connectivity, Internet offers huge, widely and freely accessible information (virtually on any subject under the sun) on the World Wide Web (WWW).

The movement of information in the Internet is achieved via a system of interconnected computer networks that share data by packet switching using the standardized Internet Protocol Suite (TCP/IP). It is a "network of networks" that consists of millions of private and public, educative, business, military and government networks of

local to global scope that are linked by copper wires, fiber-optic cables, wireless connections and other modern day technologies.

The terms Internet and World Wide Web are often used in every-day speech without much distinction. However, the Internet and the World Wide Web are not the same. The Internet is a global data communications system. It is a hardware and software infrastructure that provides connectivity between computers. In contrast, the Web is one of the services communicated via the Internet. It is a collection of interconnected documents and other resources, linked by hyperlinks and URLs.

WHAT IS CYBERSPACE?

Cyberspace is both everywhere and nowhere. It is the non-physical space where all this data exists. When you are reading a page on the web, you are in the cyberspace!

WHERE IS ALL THE CONTENT OF INTERNET STORED?

It is stored in 'Servers'; servers are special computers owned by Companies or Organizations. Some of them then lease out smaller segments to individuals.

KEYWORDS ASSOCIATED WITH THE INTERNET

1. **WEB BROWSER**- Moving along the web is called "browsing", as if we were in a bookstore browsing the shelves. That's why any software program that helps browsing is called a 'Browser' - Web Browsers are programs we use to view the Internet. There are two main Web Browsers, Microsoft Internet Explorer and Mozilla Firefox. The

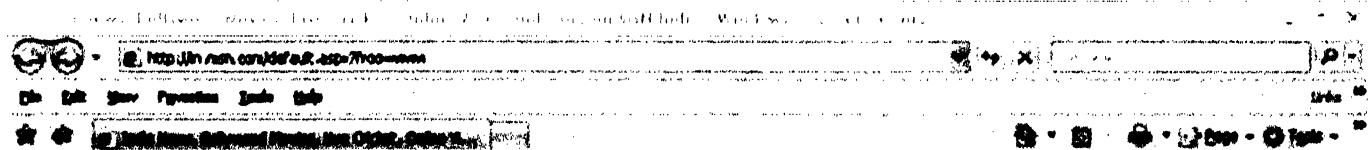


Fig 1

program used here to describe several steps/ functions is Microsoft Internet Explorer.(Fig 1)

2. WEBSITE vs. WEBPAGE- A Website is a place within the Internet that contains multiple "Webpages". For example www.njhonline.com is a "Website", while any article you view on it will be a "Webpage".

3. URL- Uniform Resource Locator- Each page on the Web is designated by an Internet address. It identifies the location of any Web page, among trillions of pages in a hierarchical path. It helps locate a particular page when you want it. You need to know the EXACT address of that page! The URL for the NJH website is http://www.njh.in. This is the address that you would type in the address bar at the top of Internet Explorer to go to NJH main page.(Fig 2)

4. HTML- HTML is an Internet programming language that is used to create webpages. Most pages you see on the Internet are HTML pages.

5. HYPERLINK- A Hyperlink is a string of text or a picture that takes you to another part of a webpage or another website/webpage. It is nothing more than a transport to somewhere else. Hyperlinks are usually a different font color and are underlined. You can notice a hyperlink by scrolling your mouse over the words and/or pictures and viewing the cursor arrow (↔) turning into the image of a hand with outstretched index finger.

6. SURFING THE WEB- "It implies an effortless glide within a huge space, which is basically what we

do when we browse Web pages: moving from one site to another.

7. NAVIGATION- Moving around the Web randomly is easy; finding our way to specific information is somewhat trickier. Unlike a book..., because cyberspace has no direction to it. When we follow definite links to reach the page we want, it is navigation. Eg

i. Type in <http://www.njh.in> - the home page of NJH website opens; Click on SURESHOT Rapid Cure in Left lower corner (example of an hyperlinke image) - http://www.njhonline.com/rapid-cases/2005/rapid_cases.shtml the section main page of SURESHOT cases - select the case you wish to read, say Case 39 - click on it - and bingo http://www.njhonline.com/rapid-cases/2005/rapid_cases39.shtml you reach the webpage showing Case 39! This was navigation (where you knew what you wanted)(Fig 3)

8. DOMAIN NAME- The web address of any website home page is called the domain name, eg <http://www.njh.in> is the domain name of NJH website and tying this will open the homepage of NJH. Each domain name has 2-3 letters at the end and that signifies what kind of website that is. These 2-3 letters are called Top Level Domain (TLD). Some examples

1. *****.com - commercial
2. *****.org - Non profit org

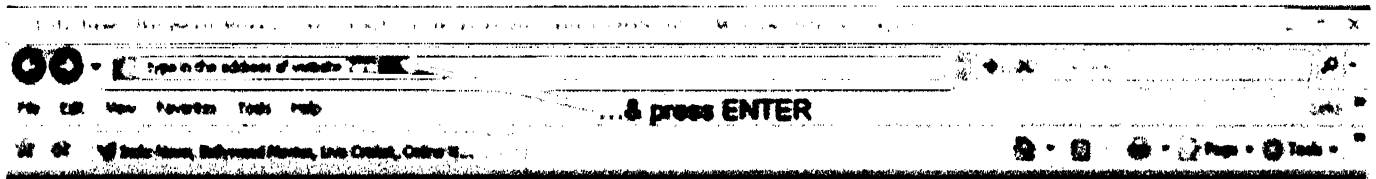


Fig 2

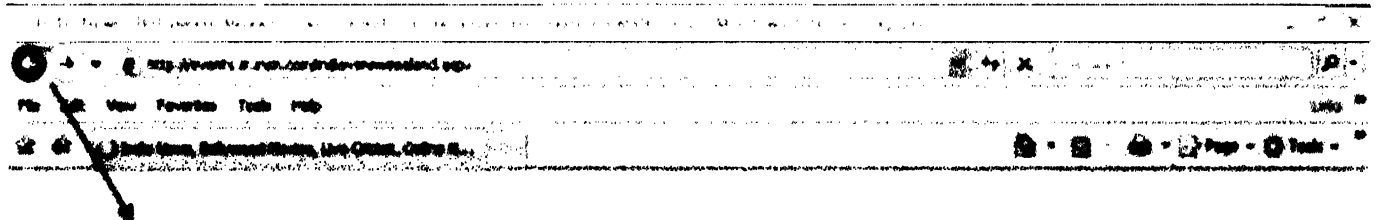


Fig 3

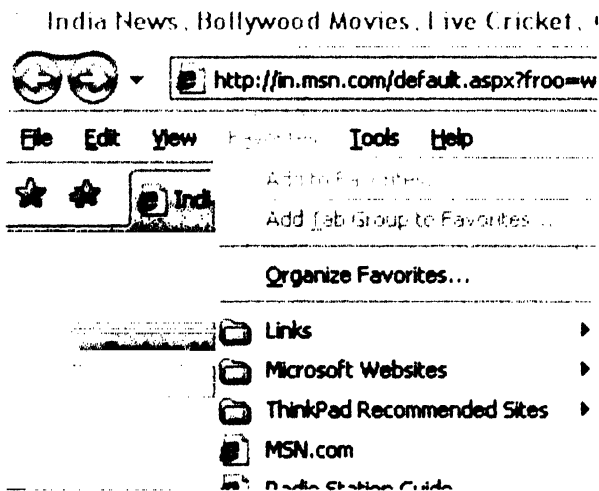
3. *****.au - Australian website
4. *****.net - Infrastructure provider
5. *****.edu - Recognized Educational Inst
6. *****.gov - Government
7. *****.mil - Military
8. *****.inm - Indian website
9. *****.uk - British website
10. *****.au - Australian website

TIPS ON USING INTERNET EXPLORER

INTERNET EXPLORER: FAVORITES

This facilitates saving links to pages we would like to frequently return to OR visit often

1. Click FAVORITES button on the menu
2. Opens FAVORITES panel to the left in the Explorer window. This provides a list of websites that we have saved as our FAVORITES when earlier using Explorer and by clicking one we can automatically connect to it, saving the hassle of search or navigation.
3. Go to any webpage that you wish to save, say section main page of SURESHOT cases http://www.njhonline.com/rapid-cases/2005/rapid_cases.shtml and
4. Click Add FAVORITES- A link will be established that will take you directly to this page in future.
5. Deleting FAVORITES- When you feel that you are not likely to visit that page again.
6. Alt + a Shortcut to open FAVORITES panel



INTERNET EXPLORER: HISTORY

This saves links to pages we have visited in recent past. One can customize how many days history to be saved; people who spend a lot of time on the web, usually save 1-2 days history but have well organized FAVORITES folder. New entrants can even keep 20 days history.

1. Click HISTORY button on the menu -
 2. Opens HISTORY panel to the left in the Explorer window. This provides a list of websites that we have previously visited when using Explorer and by clicking one we can automatically connect to it, saving the hassle of search or navigation.
 3. Deleting HISTORY - If every morning you find your HISTORY empty - somebody may be visiting websites at night that cannot be disclosed!
 4. Ctrl + h - Shortcut to open HISTORY panel
- HOMEPAGE-** Every time you open your web browser, it opens a certain page (in Internet Explorer it is generally MSN Search. You can adjust it to open the page of your choice.
1. Open the Web page that you wish to designate as your Home Page.
 2. On the **Tools** menu, click **Internet Options**.
 3. In the **Home page** area, click 'Use Current'.
 4. Click Apply and then click OK
 5. Next time you open Internet Explorer, the page of choice will open up.

TIPS FOR BETTER BROWSING AND NAVIGATION

Proper use of various tools and search engines ensures that you are navigating more and browsing less.

1. Be precise. The more specific your search is, the more likely you will find what you want. Tell a search engine EXACTLY what you are looking for.
2. Make sure you have spelled the words correctly.
3. Don't include words that appear so often. These include "it," "and," "me," "of," "a," and "the". Most search engines ignore them
4. Use the plus (+) and minus (-) signs to refine your search.

5. We want to make sure that a search engine finds pages that have all the words we enter, not just some of them. The (+) sign tells the search engine to retrieve only pages that include this word.
6. It is especially helpful when we feel overwhelmed with information, as then only we will learn to refine search.
7. The (-) sign tells the search engine to discard pages that contain a particular word. Don't include a space between these signs and the search words
8. You want a search engine to find pages that have one word on them but not another word. The - symbol lets you do this.
9. Be careful about using punctuation in your search query. Including a (?) or (!) mark, for example, might result in a "No matches found" message
10. Using quotation marks to further refine the search as then we get pages where the terms appear in exactly the order we specify.
11. Opening the webpage in a new window- Press and hold down the SHIFT key while you click a link. The page will open in a new Internet Explorer window.
12. Look at two Web pages side by side- To view any open windows side-by-side, right-click an empty part of the taskbar and click either **Tile Windows Horizontally** or **Tile Windows Vertically**.
13. Saving time and effort in typing URL addresses- Type the domain of an address, such as njhonline and then press CTRL+ENTER. Internet Explorer automatically wraps "http://www....com" around what you typed and opens the webpage. It does not apply to .in or .org sites; still it is easier to change last few words as most people make mistakes while writing http://. Liberal use of FAVORITES and HISTORY eliminates this hassle.
14. Searching within a webpage- You have come to the age you want but don't have to read the whole page - CTRL + F - helps you search for a word on a particular page thus saving time.
15. Cookies- A message given to a Web browser by a Web server. The browser stores the message in a text file. The message is then sent back to the server each time the browser requests a page from the server. The main purpose of cookies is to identify users and possibly prepare customized Web pages for them.

Internet Search

Abstract: Internet has over 300 trillion pages. Searching, individually, for what one wants is virtually impossible - Bingo! Enter SEARCH ENGINES! A Web search engine is an online software designed to search for information on the World Wide Web. In web language, search results are called hits. Hits consist of web pages, images, information and other types of files. One of the earliest search engine was Lycos launched in 1994; then came Alta Vista ('95), Hotbot & Askjeeves (96'), Google ('98), Yahoo search ('04), MSN search ('06). Yahoo search is a web directory where each listing is manually checked by humans and listed. A search engine has a kind of robot that crawls across the web to pickup what is new and portrays as a hit. As a consumer, we should master one (at the most two) search engines for our searches. Today Google is used more than any other search engine - Dr C H ASRANI

Internet search is simple! You have to know what you are looking for and bingo!!! You would find it even before you blink (Google – one of the most

popular search engines - returns 205,000,000 results for Cancer in 0.08 seconds). Cool, isn't it? You have to just type whatever you wish to search

in the search box, hit Enter or click on the Search button, and your search engine will search the web for pages relevant to your query.

Some facts you must know

1. Search is always case insensitive. Searching for Pulsatilla¹ is the same as searching for pulsatilla.
2. Every word matters - Generally, all the words you put in the query will be used. If you put 3 words in the search box, then it will search for web pages that have all the 3 words in the same order as you have asked for!
 - i. Pulsatilla menstruation clots - about 5,570 for Pulsatilla menstruation clots. (0.22 seconds).²
 - ii. menstruation clots Pulsatilla - about 42,800 for menstruation clots Pulsatilla. (0.27 seconds)

Another example


- iii. who - about 2,240,000,000 for who. (0.17 seconds) – most of them webpages w.r.t. World Health Organization.
- iv. who malaria - about 7,730,000 for who malaria. (0.28 seconds) – most of them webpages w.r.t. World Health Organization's activity in Malaria.
- v. Malaria India - about 2,310,000 for malaria India. (0.24 seconds) – most of them webpages w.r.t to malaria in India.
3. Some words are ignored eg a, for, the but at times they may be used. Eg
 - i. Repertory - about 3,730,000 for repertory in. (0.21 seconds)
 - ii. The repertory - about 3,190,000 for the repertory in (0.23 seconds)
4. Avoid abbreviations, especially medical ones - Search for full word
 - i. Pulsatilla - about 614,000 for pulsatilla. (0.08 seconds) – with first item being Pulsatilla – Homoeopathic remedies

- ii. Puls - about 41,000,000 for puls [definition]. (0.21 seconds) – with NO mention of homoeopathy (or pulsatilla) in first 50,000!
- iii. Punctuation is usually ignored (that is, you can't search for @!#\$%^&*()=+[]\ and other special characters). Exception is \$ (dollar sign is picked up next to numbers eg 400\$; # is picked as 'number' ie House no ie #3.

GUIDELINES FOR BETTER SEARCH

1. Keep it simple: If you're looking for a particular disease, remedy, product or person, just enter full name, or as much of its name as you can recall. If you're looking for a particular concept, place start with its name. Most queries do not require advanced search., Simple is good.
2. A search engine is just a program written to search a word/ many words across web pages globally by matching the words you give to pages on the web. Use commonly used words – backache and not back pain.
3. Use only the words that you require. Each additional word would limit the search. If you use few words, you will miss a lot of useful information.
4. Search for images: most search engines have a separate link – images – a click on that takes you to the image bank of that search engine.
5. Search for powerpoint presentation: pulsatilla ppt à about 1,100 for pulsatilla ppt. (0.17 seconds) – PowerPoint presentations involving pulsatilla (presentations in .pdf are also amongst hits.
6. Search for white papers - A white paper is an authoritative report or guide that often addresses problems and how to solve them. White papers are used to educate readers and help decision making:
 - pulsatilla white papers - about 115 for pulsatilla white papers. (0.19 seconds)

Ramlal takes his wife for delivery to the maternity hospital. His wife delivers a baby boy. Nurse says to Ramlal, " Mubarak ho aap ke ghar ladka aaya hai" Ramlal says "Wah, kya technology hai, idhar biwi ko hospital leke aaya hoon aur udhar beta ghar bhi pahunch gaya"



Microsoft Word

Microsoft Word is a powerful tool to create professional looking documents. It is a word processing software package. It can be used to type letters, reports and other documents. It gives us the ability to use our home / clinic computer for desktop publishing. MS Word 2007 makes our work easier, our documents more attractive and enables us to work more efficiently.

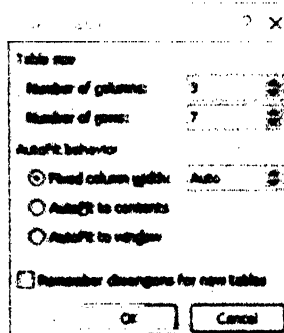
FEATURES

1. While typing data into Microsoft Word, each time we press the Enter key, Word creates a new paragraph. We can format paragraphs. For example, we can indent the first line of a paragraph, we can set the amount of space that separates paragraphs, and we can align a paragraph left, right, center, or flush with both margins (called *justify*).
2. Styles are a set of formats we can quickly apply to a paragraph. For example, by applying a style, you can set the font, set the font size and align a paragraph all at once. (Discussed in detail later in Tips while preparing a Thesis).
3. When we have data in a list, we can either number them or bullet them. Both these are easy when using Microsoft Word.
 - o This is bulleted (there are several types of bullets one can use)
 - i. This is numbered (there are several types of number formats one can use)
4. One can use different fonts (text type) eg Font, **Font**, Font, **Font**
5. Thesaurus- Contains synonyms and sometimes antonyms, in contrast to a dictionary, which contains definitions. Hit [Shift + F7] keys together and a window will open on the left side and you can search in Thesaurus.
6. Spelling and Grammar check- Hit [F7] and MS Word will check your written content both for spelling and grammar. All words that MS Word thinks are mis spelt will get a red underline (even our names, medical terms and homoeopathic remedies will be so picked up

as they are not a part of English dictionary). All that is grammatically incorrect will be underlined green. On right clicking, there is an option for either correcting or adding that to the dictionary).

7. Tables- Another extra ordinary tool in word; create professional looking tables with all possible permutations and combinations

i. Inserting a Table - Place the cursor, where you want your table to be - Click [Table] at top of menubar - Click[Insert] - click [Table] - enter the number of rows and columns you want



ii. Give your table dimensions and your table is ready

iii. You can have various types of colors or other formats

iv. You can merge and split cell. See the above table converted to

Author's Note: Any article giving all features of MS Word will take at least 250 pages. It is a versatile software and is intended just to attract you to start using it. All MS software has an exhaustive HELP section for you to learn. If sufficient doctors are interested, classes also can be organized.



EXCEL

Abstract: This is the briefest write up on MS Excel - a versatile software and is intended just to attract you to start using it. All MS softwares have an exhaustive HELP section for you to learn. If sufficient doctors are interested, classes also can be organized. - Dr CH ASRANI

Microsoft Excel is a spreadsheet-application written and distributed by Microsoft for Microsoft Windows. It features calculation and graphic tools in addition to many advanced tools that are not of much use to medicos.

A spreadsheet is the computer equivalent of a paper ledger sheet. It consists of a grid made from columns and rows.

It is an environment that can make number manipulation easy and somewhat painless.

Let's explore what makes a spreadsheet work. Spreadsheets are made up of

* **COLUMNS-** In a spreadsheet the COLUMN is defined as the vertical space that is going up and down the window. Alphabets are used to designate each COLUMN'S location.

* **Rows-** In a spreadsheet the ROW is defined as the horizontal space that is going across the window. Numbers are used to designate each ROW'S location.

* **INTERSECTIONS OF A COLUMN OR ROW ARE CALLED CELLS-** In a spreadsheet the CELL is defined as the space where a specified row and column intersect. Each CELL is assigned a name according to its COLUMN letter and ROW number, eg A5 or B6.

In each cell there may be the following types of data

1 Labels are text entries. They do not have a value associated with them. We typically use labels to identify what we are talking about.

2 Constants are entries that have a specific fixed value. If someone asks you how old you are, you would answer with a specific answer. Sure, other people will have different answers, but it is a fixed value for each person.

3 Formulas (mathematical equations that do all the work) - You can learn these once you start using MS Excel.

Date	Name of the patient	Diagnosis	Miasm	Acute Remedy	Intercurrent	Constitutional	Payment
1/4/2009	Mrs Neelam Verma	Fibrosis	Sycotic	Bryonia	Thuja	Natrum mur	300
1/4/2009	Mrs Karuna Desai	JRTI	Tubercular	Pulsatilla	Tuberculinum	Silica	70
1/4/2009	Mr Rahul Vora	Obesity	Sycotic	Pulsatilla	Medorrhinum	Calc carb	70
1/4/2009	Master Viraj Doshi	Enuresis	Tubercular	Ars- alb	Tuberculinum	Calc- sil	70
1/4/2009	Master Manoj Mehta	Behavioral disorder	Tubercular	Kali-sulfur	Tuberculinum	Verat- alb	300
1/4/2009	Mr Akbar Sheikh	Hicups	Sycotic	Nallia	Medorrhinum	Kali-carb	140
1/4/2009	Mr Genesis Dsouza	Rheumatoid Arthritis	Sycotic	Rhus-tox	Thuja	Silica	70
1/4/2009	Dr Sudhesh Smetty	Bronchitis	Tubercular	Viburnum opulum	Tuberculinum	Lachesis	70
1/4/2009	Mrs Sheena Menon	Psoriasis	Psora	Pulsatilla	Sulphur	Natrum mur	140
1/4/2009	Mr Brijesh Mehta	Asthma	Tubercular	Bleeta	Tuberculinum	Silica	70
1/4/2009	Mr Ramdas Jaiswal	Gangrene	Syphilitic	Ars- alb Sarcococ			70
1/4/2009	Mrs Ramwati Yadav	Gout	Sycotic	Bismuthum acidum	Thuja	Kali-carb	210
1/4/2009	Mrs Hema Shrivastavi	Fibrosis	Sycotic	Puls	Thuja	Natrum mur	140
1/4/2009	Ms Anuja Mitta	Alopecia	Tubercular	Par. Ars- alb	Tuberculinum	Silica	300

Fig 1

SEE FIG 1, ENTRIES IN A HOMOEOPATH'S DAILY PRACTICE

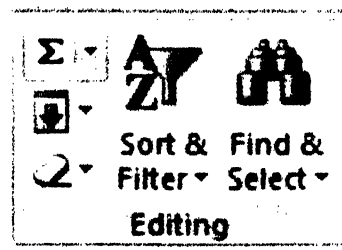


Fig 2



Basic Math Function of Adding, can be easily accomplished by selecting the cells you wish to add (in this case column H) and the clicking on Sigma symbol on the toolbar & it gives you the total-! (see Fig 2)

You will ask: 'Why do it in Excel? I have a calculator!'

The mathematics that goes on behind the scenes on the paper calculation is overwhelming. If we change one of the variables, we have to start the calculation all over again (from scratch). The nice thing about using a computer and spreadsheet is that you can experiment with numbers without having to RE-DO all the calculations. In the following image, focus on the total of fees collected.

Let's change entry no 7 & 10 from 140 to 200 and let the COMPUTER do the calculations! (see Fig 3)

Since this is just to introduce you to Excel, let me give you the briefest of introduction of how to maintain valuable data of your practice.

Adding Filter in an Excel sheet - enables filtering of the selected cell, visible by tiny downwards facing arrow heads.(see Fig 4)

The practitioner wishes to see how many of the patients were given *Tuberculinum* - see column F. (see Fig5 & 6)

A	B	C	D	E	F	G	H
Date	Name of the patient	Diagnosis	Miasm	Acute Remedy	Intercurrent	Constitutional	Payment
1/4/2009	Mrs Neelam Menra	Fibroids	Sycotic	Bryonia	Thuja	Natrum-mur	300
1/4/2009	Mrs Kanika Desai	JRT	Tubercular	Pulsatilla	Tuberculinum	Silica	70
1/4/2009	Mr Rahul Vora	Obesity	Sycotic	Pulsatilla	Medorrhinum	Calc-carb	70
1/4/2009	Master Viraj Doshi	Enuresis	Tubercular	Ars-alb	Tuberculinum	Calc-sil	70
1/4/2009	Master Manoj Mehta	Behavioral disorder	Tubercular	Kali-sulph	Tuberculinum	Verat-alb	300
1/4/2009	Mr Akbar Shah	Warts	Sycotic	Kali-o	Medorrhinum	Kali-carb	140
1/4/2009	Mr Genelia D Souza	Rheumatoid Arthritis	Sycotic	Mus-tox	Thuja	Sepia	70
1/4/2009	Dr Sudhesh Shetty	Bronchitis	Tubercular	Viburnum-opulum	Tuberculinum	Lachesis	70
1/4/2009	Mrs Shenas Menon	Psoriasis	Psora	Pulsatilla	Sulphur	Natrum-mur	140
1/4/2009	Mr Brjesh Mehta	Asthma	Tubercular	Bista	Tuberculinum	Silica	70
1/4/2009	Mr Ramdas Jaiswal	Gangrene	Syphilitic	Ars-alo Secal-car	Thuja	Kali-carb	210
1/4/2009	Mrs Ramwati Yadev	Gout	Sycotic	Puls	Thuja	Natrum-mur	140
1/4/2009	Mrs Hemal Shrivani	Fibroids	Sycotic	Puls	Thuja	Natrum-mur	140
1/4/2009	Ms Anuja Mitra	Alopecia	Tubercular	Puls Ars-alo	Tuberculinum	Silica	300

Fig 3

Fig 4

Fig 5

A	B	C	D	E	F	G	H
Date	Name of the patient	Diagnosis	Miasm	Acute Remedy	Intercurrent	Constitutional	Payment
1/4/2009	Mrs Kanika Desai	JRT	Tubercular	Pulsatilla	Tuberculinum	Silica	70
2/4/2009	Master Viraj Doshi	Enuresis	Tubercular	Ars-alo	Tuberculinum	Calc-sil	70
2/4/2009	Master Manoj Mehta	Behavioral disorder	Tubercular	Kali-sulph	Tuberculinum	Verat-alb	300
1/4/2009	Dr Sudhesh Shetty	Bronchitis	Tubercular	Viburnum-opulum	Tuberculinum	Lachesis	70
1/4/2009	Mr Brjesh Mehta	Asthma	Tubercular	Bista	Tuberculinum	Silica	70
1/4/2009	Mrs Anuja Mitra	Alopecia	Tubercular	Puls Ars-alo	Tuberculinum	Silica	300

Fig 6

Computer Security

As if we medicos are not enough rattled by viruses in practice, regular use of internet or sharing with friends exposes to a very serious problem on the Internet – COMPUTER VIRUS.

A virus is another computer software – written to destroy. It can copy itself, infect a computer without knowledge of the owner; further reproduce and spread to all files and thru internet, e-mail or thru storage media (floppy, pen drive etc) spread to other computers. The term “virus” is commonly used to refer to other types of malicious software and spyware programs that infect but do not have the reproductive ability.

HOW TO PROTECT YOUR COMPUTER?

ANTI VIRUS SOFTWARE: It is a computer software used to identify and remove computer viruses, as well as other harmful computer software, collectively referred to as malicious software (including worms and trojan horses). Since every day hundreds of computer viruses are created, it is natural that anti virus programs also need to update themselves. There

are several brands available and you can use ONLY one! Use one and ENSURE that it is regularly updated. Before transferring any file to your computer, disinfect the device (USB drive or CD) using latest version of an antivirus program.

FIRE WALL: An integrated collection of security measures designed to prevent unauthorized electronic access to a networked computer system (even your home PC when connected to the web transforms into a networked computer). It can also be configured to permit, deny, encrypt, decrypt, or proxy all computer traffic between different security domains based upon a set of rules. Windows XP has a robust Firewall and strongly recommends to enable it.

BACK UP: Essentially a contingency plan in event of a failure; in information technology, backup refers to making copies of our valuable data so that in event of a data loss, backup copy can be used to restore the original. Data loss happens to regular users or others very commonly to as high as 65%+.

Tips for preparing thesis

I see MD students running from pillar to post to prepare their thesis dissertation. Their main concerns are Table of content and inserting page numbers. Here are few tips

TABLE OF CONTENT (TOC)

This is accomplished in 2 easy steps. First decide what you want to give you in TOC and format it in STYLES. In MS Word, click on [FORMAT] in menu bar; from a drop down menu that appears - click [STYLES and FORMATTING] - a window will open on left margin - shows a list Heading1/ Heading2/ Heading3/ Heading4. Once you have decided main heading, sub heading, 3rd level heading etc, select each of those words and convert it to Heading Styles. Now use the [STYLES] function of MS Word where different formatting of text is organized.

Once your thesis is full of such well thought of headings click on [INSERT] in the menu bar; from a drop down menu that appears - click [FIELD] - a new window will open labeled FIELD - from the drop

down menu - select [TOC] - in the field properties click on the bar saying [TABLE OF CONTENTS] - select

Heading 1

Heading 2

Heading 3

And select 2 radio buttons in front of o show page numbers and o right align page numbers and the TOC will appear as

Contents

<u>Scope</u>	1	<u>An aggregate summary</u>	2
<u>Last decade</u>	1	<u>Worksite health</u>	3
<u>How It Works</u>	2		

PAGE NUMBERS

In MS Word, click on [INSERT] in the menu bar; from a drop down menu that appears - click [PAGE NUMBERS] - select whether want page numbers at top or bottom of page; select how you want it aligned – left, centre or right of the page - click [OK] and all pages would be numbered.