## The internet as a health education tool: sieving the wheat from the chaff

Goh S H

The internet has empowered the human race in the pursuit of knowledge like no other media has before, with the possible exception of the printing press. Some may argue that print and broadcast media have also the same potential as the internet to disseminate false or misleading information, but one important difference is that while the former two can be regulated by authorities, the internet cannot be so easily policed.

Many doctors by now would have encountered the increasing number of educated patients who use the internet to seek out health information. We have seen patients coming to the hospitals and clinics, holding in their hands printouts from the internet, asking probing questions on their conditions. By and large, their concerns and queries are legitimate and relevant. Some patients inevitably are suffering from hypochondriasis, while others with terminal or chronic conditions will be looking desperately for a cure or a second opinion from sources other than their physicians. Inaccurate, incomplete, or biased information is potentially more damaging than no information. For example, people who choose to believe online information may be convinced to ignore their symptoms or rely on unproven treatment strategies in lieu of professional medical treatment.

This same sentiment is also often shared by the busy doctor. How often have the heavy workload and the short consultation times limited the amount of interaction with our patients? The busy pace of the polyclinics, the specialist outpatient clinics, and the emergency departments precludes many of us from giving quality time to our patients. Caring for the patient should not just be about prescribing pills or carrying out procedures. To make the treatment whole, doctors and nurses should advise the patients and their relatives on the nature of their conditions.

Nowadays, the pros and cons of the various types of treatment for some conditions have to be put forward and mulled over by the patient and family members. Lifestyle changes often have to be made in the cases of chronic conditions. This aspect of care is often lacking in the "conveyor belt" medical practice now being seen in busy institutions with their perennial lack of manpower and staffing. At such times, many of us wish there was a source of information to which we could refer our patients. Well, now there is the internet.....and doctors and nurses can (and should) leverage upon this new technology to achieve such an objective. True, there are information brochures available in the specialist clinics of many hospitals and also the polyclinics, but they are expensive to print, provide logistical problems, and the information carried constantly needs updating.

Of course, some doctors will also have the experience of patients coming back and telling them that there are new technologies and drugs now available for their conditions, so why is it that the good doctor is not offering it to them? By and large, I have found that telling them honestly that either the technology (or drug) is still new, or is still being assessed for its safety and efficacy, or awaiting approval, will help them understand why they are not being prescribed the treatment yet. One can always quote the cox-II inhibitors, and Slim 10 incidents as examples whereby treatment can go wrong despite the best intentions. Such incidents are fortunately rare, and should not cause the practitioner to deviate from normal day-to-day practice. In fact, it should be of comfort to doctors that patients are active partners in taking responsibility for their own health.

It is therefore appropriate that this issue should highlight the pattern of usage of a local website proving healthcare information for the Singaporean public<sup>(1)</sup>. The Health Promotion Board has spent considerable effort and time in setting up a portal that is easily navigable, uses clear and simple language in explaining medical terms and references, and at the same time is constantly updated. There are

Department of Accident and Emergency Changi General Hospital 2 Simei Street 3 Singapore 529889

Goh S H, MBBS, FRCS, FAMS Senior Consultant and Chief

Correspondence to: Dr Goh Siang Hiong Tel: (65) 6850 1687 Fax: (65) 6260 3756 Email: siang\_hiong\_goh @cgh.com.sg over 150 conditions described in the portal, each of which is thoroughly explained and well-illustrated with pictures. Take, for example, its information page on dengue fever. It described clearly the classical symptoms and signs that a dengue patient would expect. I was surprised to learn that besides the petechial and erythematous types of rashes, the dengue rash could also be itchy and maculopapular in appearance. Going lower down the page, it gave practical tips on how to prevent the *Aedes* mosquitoes from breeding at home, and there was even a downloadable booklet on dengue fever in a soft copy.

The range of topics extended from the realm of medical and dental issues to that of mental and public health. There are suggestions on how one could look after the elderly at home, provide aftercare for the stroke patient, give first aid for cuts and bruises, as well as make the home safer for young children. One can even search for health education materials and download them for printing. Articles include smoking cessation, breast screening, fighting obesity and diabetic care, to name a few. If I am a general practitioner in a busy practice, I would seriously consider printing them out for the benefit of my patients! There is also a calculator to measure one's body index, healthy recipes for diabetics, immunisation schedules, as well as games to attract the young. I wondered that such a highly informative portal could remain undiscovered for so long, I certainly would urge medical colleagues to publicise it to their patients.

Various authors have assessed the quality of information on the World Wide Web<sup>(2,3)</sup>. Helping your patient choose a reliable source of information on the internet is not difficult. Some questions you and your patient should consider when assessing the reliability of a site should include:

- a) Which organisation maintains the website? Government sites or healthcare organisations are good sources for scientifically sound health and medical information. However, those set up by private practitioners, commercial or lay organisations may have marketing, social or political agendas that can influence the type of information they provide and which sites they are linked to. Go for reputable organisations such as the Health Promotion Board of Singapore, the American Medical Association, the US Food and Drug Administration, and the UK National Health Service.
- b) Is there a listing of the names and credentials of those responsible for providing the site's

- contents? Recommend only those with renowned authorities with proper medical credentials. Be wary of those cures who advocate homeopathy, acupuncture and herbal treatments only.
- c) Does the site link to other sources of medical information? Many reputable sites run by responsible organisations will not position themselves as the sole source of information on a particular health topic. They will often offer links to other sources of information. On the other hand, links alone are not a guarantee of reliability. Some websites can create links to a legitimate and reputable site, thus making their own site look legitimate, or giving the reader the impression that their information or products are endorsed by such organisations.
- d) Is the site constantly or recently updated? With the rapid pace of change in new discoveries and drug treatments, frequent updates are needed to keep the site up-to-date and provide current information. It also tells the reader that constant care and a certain degree of responsibility are being exercised at this particular site. Ideally, health and medical sites should be updated weekly or monthly.
- e) Are informative graphics and video or audio clips available? Such features can assist in clarifying medical conditions and procedures. Bear in mind, however, that multimedia should be used to help explain medical information, not substitute for it. Such sites may have colourful or catchy "bells and whistles" but little scientifically sound information.
- f) Does the information sound valid? Ask your patient to compare the information he or she finds on a site with other sites, news accounts, or library resources. If the information on a site is too radically different, be suspicious. They can counter check with you in any case.
- g) Is the information "too good to be true"? In such cases, it probably is. Some marketeers or fake doctors push miracle cures for cancer and other diseases without enough evidence or studies to show that they work. Exercise caution with such sites. Once again, compare the information with that from other sites.
- h) Is the site telling your patient to make a purchase or provide personal data or money? No matter how good a plan or remedy might seem, check the information out or talk to a doctor before acting on it. Do not order drugs through the internet, especially those on offer through spam email. They can be counterfeit and even downright harmful.

Like it or not, more and more of our patients will go to the internet to look for information. It falls upon us to make sure that they are referred to sources that do no harm. It is to our advantage if patients want to educate themselves about their conditions. By so doing, the partnership can bring about a better quality of care.

#### REFERENCES

- Vijaya K, Chan SP, Lim YYL, et al. HPB Online: an electronic health education portal in Singapore. Singapore Med J 2006; 47:8-13
- Purcell GP, Wilson P, Delamothe T. The quality of health information on the internet. BMJ 2002; 324:557-8.
- Culver JD, Gerr F, Frumkin H. Medical information on the internet: a study of an electronic bulletin board. J Gen Intern Med 1997; 12:466-70.

# Do you have patients suffering from Pulmonary Arterial Hypertension?

### Research study on Pulmonary Arterial Hypertension in Children

KK Women's and Children's Hospital is currently participating in an international, multicentre clinical trial to evaluate the use of an oral PDE-4 inhibitor in treating pulmonary arterial hypertension (PAH) in children where chronic therapy is needed.

#### ... What is this research study all about?

16-week randomized, placebo-controlled study followed by an extension study where all subjects will receive the active drug.

#### ...Who is eligible?

- ☑ Children aged 1-16 years
- ✓ Weighing ≥ 8 kg
- Patients who have symptomatic PAH

#### ...Who is not eligible?

- ☑ Patients with left-sided heart disease, pericardial constriction or;
- moderate to severe restrictive pulmonary disease or;
- severe or chronic lung disease, bronchopulmonary dysplasia.

#### For further information, please contact:

Principal Investigator: Dr. Wong Keng Yean, Email: kywong@kkh.com.sg Study coordinator: Ms. Delphine Lim, Mobile: 9753-4837

A1481131/56 KKWCH Ad/V1 dated: 02 Aug 2005