THE INTERNET AND THE WORLD WIDE WEB: APPLICATIONS FOR FAMILY PHYSICIANS IN SAUDI ARABIA

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أحدث انتشار شبكة المعلومات العالمية تطورا سريعا في استخدامات الحاسب الآلي و الإنترنت. فقد سهلت الشبكة طرق الحصول على المعلومات و جعلّتها أقل كلفة و أكثر مرونة في الاتصال بالمرضى أو بالآخرين من ذوي المهن المتقاربة.

يهتم تخصص طب الأسرة أو الممارسة العامة بالفرد لشخصه أو كجزء من الأسرة بدون أية حدود عمرية، جنسية أو حتى نوع المشاكل الصحية التي تعتري الشخص أو أسرته. و لتقديم خدمة طبية عالية الجودة من خلال هذا التخصص تبلورت صفات طبيب الأسرة بإلمامه المتميز بمهارات الاتصال بالآخرين، و بالتفكير النقدي، و بإدارة الموارد و المعلومات، و بالتعلم الذاتي المستمرمدى الحياة، و بتقديم الرعاية الطبية السريرية و النصح للمجتمع. و لتقديم مثل هذا النوع من الرعاية الرفيعة المستوى كان من الضروري أن يعتمد تخصص طب الأسرة على المعلومات و تقنياتها. و من ناحية أخرى فإن التوسع الكبير و الانتشار السريع للمعلومات الإليكترونية من خلال الإنترنت و شبكة المعلومات العالمية يشكل تحديا حقيقيا لأطباء الأسرة. لذا كان لزاما على أطباء الأسرة بالمملكة العربية السعودية أن تكون لديهم المعلومات و المهارات الخاصة التي تساعدهم على الحصول على المعلومات الموثوق بها علميا عن طريق الشبكة العالمية و استرجاعها عند الحاجة إليها بكل سهولة لكي يحققوا التطوير المهني لأنفسهم و من ثم الخدمة الطبية المتميزة لمرضاهم. تلقي هذه المقالة الضوء على أهم استخدامات الشبكة العالمية للمعلومات، مع بعض الأمثلة لأهم المواقع المفيدة بالشبكة و التي تهم أطباء الأسرة بالمملكة العربية السعودية.

الكلمات المرجعية: الإنترنت، شبكة المعلومات العالمية، طب الأسرة/الممارسة العامة، المملكة العربية السعودية.

The introduction of the World Wide Web has revolutionized the applications of the computer and the Internet in the medical field. The Web provides an easy and cost-effective way of retrieving medical information and a more flexible way of communicating with patients and colleagues. Family practice is a specialty in which care is given to persons as individuals and members of families regardless of their age, gender or specific problems. To provide quality family practice, a family physician should be a good communicator, a critical thinker, a resource and information manager, a life-long learner, a care giver and a community advocate. Providing such high quality care requires that family practice be an information-sensitive specialty. However, the expansion of the new electronic resources on the Internet and the Web poses a real challenge to the family physician. Family physician in Saudi Arabia need to have basic skills and knowledge for easily retrieving and finding reliable Internet information for his professional development and the care of his patients. This article addresses the Web applications for family physicians in Saudi Arabia, giving examples of the most important Websites.

Key Words: Internet, World Wide Web, Family Practice/Medicine, Saudi Arabia

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INTRODUCTION

The uses of medical technology for information management, diagnostic and therapeutic purposes enable family physicians to enhance family practice and improve patient outcome.[1] The recent advances in medical technology and the rapid growth in computing and the Internet have already changed medical practice significantly and the means by which many physicians educate themselves and communicate with each other and with their patients. The introduction of the World Wide Web (WWW or the Web) has revolutionized the application of the computer and the Internet. The Internet characteristics have been well reviewed in medical literature.[2-9] The Web provides an easy and a cost-effective way of retrieving medical information and a more flexible way of communication with patients and colleagues. It has also the advantage of enhancing education through the collection of texts, pictures, sounds and video clips. The Web can be a very rich source by which the efficiency of patient care as well as medical research irrespective of investigators' locations can be improved.[10]

Family practice is an evolving specialty ideally placed to achieve quality, cost effective, and equity in health care. The core values of family practice require a wide range of knowledge, skills and attitudes to provide personal "continuing and comprehensive medical care, health maintenance and preventive services to each member of the family regardless of sex, age or type of problem, be it biological, behavioral, or social".[11] In addition, family practice is patient-centered,[12] family-focused, community-oriented, and evidence-based.[13] To provide proper family practice, a family physician is supposed to be a good communicator, critical thinker, resource and information manager, life-long learner, care giver, decision maker, health team manager, and community advocate.

Providing such high quality care requires that family practice be a specialty that is information sensitive as well as information demanding. This in turn requires essential information about the best and most cost-efficient ways to anticipate, diagnose and manage the common health problems encountered in family practice. However, a busy family physician who encounters explosive free medical information is under increased pressure to find an up-to-date reliable information for his professional development and the care of his patients. All over the world, patients and their families nowadays can access any kind of health information on their own computers. Therefore, it is essential that the family physician be competent in the effective management of medical information to meet day-to-day patient needs as well as improve the educational and research developments in family medicine.

Saudi Arabia has experienced rapid changes in social life, patterns of diseases, education, economic growth, and more recently the introduction of the Internet. The new developments require better utilization and incorporation of the recent advances including the Internet in medical technology.

Family physicians in Saudi Arabia face many challenges. Besides the shortage of family physicians, the term "family physician" is unfamiliar to many people including health professionals, administrators, medical students and the general public.[14]

In a recent survey of all locally trained family physicians in Saudi Arabia, it was found that only 231 family physicians, which is only (0.8%) of all physicians (n = 30,281) and (4%) of all Saudi physicians (n = 5,699) working in the Ministry of Health and all other governmental health services

as well as in the private sector.[14,15] The survey also showed that both graduates and residents reported that information management and computer skills were important to their practice. Their mean scores of agreement out of five were (4.49 ± 0.57 and 4.32 ± 0.74, respectively). However, both groups thought that preparation during training for information management and computer skills was poor. The mean scores of agreement were low (2.75 ± 1.02 and 2.30 ± 1.04, respectively).

Other problems facing family physicians in Saudi Arabia are poor professional communication system, demanding work conditions and obsolete local medical Web sites. Family practice in Saudi Arabia, and consequently health care, can benefit much through the availability of well-designed and medically reliable national Web sites together with the proper training for the Internet use.

The explosion of medical information and the rapid growth of Web sites available for family physicians and their patients form a significant problem for family physicians. Every family physician should possess basic computer and Internet skills as support for the provision of high quality health care. One way to better introduce the unique values and principles of family medicine and to effectively face the current and future challenges is to have Web-based input from family physicians in Saudi Arabia. High quality, reliable and easily accessible family practice related Web sites should be available for medical students, family practice residents, family physicians, patients and their families.

This article is an attempt to help family physicians in Saudi Arabia become familiar with the Internet and available medical information relevant to their practice. A brief description of the Web is given as well as a searching for information on a variety of sites for continuing medical education (CME) and professional development and patient education. In this article, the term family physician is used to denote general practitioner as well as primary health physician.

It is worth mentioning that the Web is a rapidly changing medium and although the addresses mentioned in this article were accurate at the time of submission, consultation of search engines for the most up-to-date address is necessary. Time and space constrained us to exclude many excellent Web sites that could have been mentioned.

QUALITY OF HEALTH RESOURCES ON THE INTERNET

Health information available on the Internet is a great resource of improving health.[16,17] However, this information can be inaccurate, biased and even harmful to users.[18,19] The criteria for evaluating the appropriateness or quality of health related Internet sites have been addressed in literature.[20-23] Although currently there is no consensus for evaluating Web-based health information, there should be minimum criteria evaluating acceptable information. This should include authorship with the proper affiliations and credentials, disclosure, evidence of the source and how current information is.[20,21] Additional criteria include site quality, reliability, accuracy, scope, depth, design, and ease of use.

Six Senses Review Program (http://www. sixsenses.com/) evaluates health and medical Web sites based on six criteria: content, aesthetics, innovation, interactivity, freshness, and character. Other helpful sites for evaluating the strengths and weaknesses of Web pages can be found at the Information Quality Tool (http://hitiweb. mitretek.org/iq/default.asp), Discern (http:// discern.org.uk) or Health On the Net

Foundation (http://www.hon.ch/honcode/condut.html).

COMPUTER AND THE WEB
Access to the Web requires a computer, a modem, the appropriate software and an account with an Internet Service Provider (ISP) which connects the user to the Web in the same way a local phone company connects their users to the phone system. In Saudi Arabia, there are many companies providing Internet access. King Faisal Specialist Hospital and Research Center (http://www.kfshrc.edu.sa/) provides a free Internet access to all physicians in Saudi Arabia. ISP provides a user name and password for use in accessing the Internet, an e-mail box and instruction for computer configuration.

Most computers on the Saudi market purchased within the last three years come equipped with the necessary hardware and software for the Internet use. Software programs needed to access and use the Internet efficiently include: a word processor, a program for presentation, WinZip, an antivirus program, and program for Portable Document Format (DPF) viewing.

All computers on the Internet exchange information through the same set of protocols called Transmission Control Protocol/Internet Protocol (TCP/IP). Recent versions of Windows include or accept a program called a Web browser (Microsoft Internet Explorer or Netscape Navigator), which makes the Internet more fun and user-friendly. The Web has the advantage of using the Hypertext Markup Language (HTML), which enhances text documents with graphics and links to other sites. To reach a particular Web page you need to type (the street address) the Uniform Resource Locator (URL) into the address space. The URLs have the format (protocol://address of the host computer/

directory/file name). For example, the Saudi Society of Family and Community Medicine (SSFCM) can be accessed by typing into the Web browser the URL: (http://www.ssfcm.com/english/english.htm). It has a hypertext transfer (http://), a host computer (www.ssfcm.com), a directory (English/), and document (english.htm). Educational host names ending in ".edu" are often universities, sites with ".org" are nonprofit organizations, ".com" indicates a commercial or company sites ".net" for networking organization and ".mil" for military host.

A link is a unique feature of the Web that enables users to "surf" the Web from page to page to find the required information. Internet tutorials are a useful source for family physicians. A useful site to start with can be found at (http://www.faughnan.com/fp/net/index.html/).

SEARCHING FOR INFORMATION
Information on the Internet and its Web is vast and overwhelming and requires efficiency in locating the appropriate information. Web sites can easily be searched for any word or phrase, subject, country, educational institution, organization or company. There are two commonly used approaches: search engines, for narrower and specific searches, and directories, for broader and categorized topics.

Search engines (tools or services) which have their own Web pages are programs created to search the Internet. None of these engines contains the whole information in the Web. Therefore, different results will be obtained from different search tools. Most widely used search engines are AltaVista (http://altavista.digital.com/), Lycos (http://www.lycos.com/), Infoseek (http://www.infoseek.com/), Excite (http://www.excite.com/), Google (http://www.google.com/), and WebCrawler (http://webcrawler.com/).

Using meta-search services such as Ixquick (http://www.ixquick.com/) or MetaCrawler (http://www.metacrawler.com/) one can search multiple search engines at the same time.

To have the best results, search in two or three search services and be familiar with their characteristics. Try multiple queries using synonyms and other variations taking into consideration the differences between the British and American spelling. On gathering the appropriate results, simply save them for later analysis. Resist any attempts to follow irrelevant but attractive links.

Directories often have built-in search features beside their main categorization. Yahoo Directory (http://www.yahoo.com), classifies sites into categories (in the form of a tree) such as health, business, arts, education, society and culture subjects, etc.

Achoo (http://www.achoo.com/) is organized similarly but lists only medical topics. It includes sections on diseases, medical organizations and medically related businesses. Health and medical directories are created and maintained by human experts (Physicians, informatics specialists and librarians). They may provide a ranking system for each resource, peer reviewed and dedicated to a specific mission.

There are two types of health directories: general for multi-subjects and specific single-subject like family practice or disease specific. The American Academy of Family Physicians (AAFP) maintains a set of very high quality links to clinical resources on the web (http://www.aafp.org/sites/longlist. html). Primary Care Internet Guide (http:// www.uib.no/isf/guide/guide.htm) provides a comprehensive list of primary care related resources. Other useful Internet resources for the family physicians can be found at (http://www.lotusnet.org/it/reperio/eng/fami lymd.htm) or primary care-related Internet resources (http://views.vcu.edu/dimlist/).

Other important sites for family physicians can be found at the World Health Organization (http://www.who.ch/), World Organization of Family Doctors (http:// www.wonca.org/), Centers for Disease Control and Prevention (http://www.cdc. gov/cdc.html) and National Institutes of Health (http://www.nih.gov/).

Some tips are useful if better results in handling retrieved information in the computer are to be obtained. A suitable filing system should be developed and arranged for easy retrieval of information when most needed. Similarly, a favorite folder should be organized to include the most needed sites. A practical way is to have headings and subheadings suitable for site retrieval. The main headings including national and international sites can be subdivided into several subheadings. First, sites for family physicians include educational, clinical, research, and practice management resources. Second, sites for patients and their families include educational materials, support groups and social resources. Third, sites for subjects of interest include one's own areas of interest and expertise. Finally, there are the computer-related sites which include the essential hardware and software needed to utilize computer and the Internet effectively.

MEDLINE

Searching for medical literature or references is an integral part of family medicine, especially in the era of evidence-based medicine. Medline is produced by the United States National Library of Medicine which is considered the most useful resource for searching the medical literature. A number of suppliers offer Medline access. Some Medline service providers offer free access to titles and abstracts but full text articles can be purchased on-line.

PubMed (http://www.ncbi.nlm.nih.gov/ pubmed) which is located at the US

National Institutes of Health is a very good Medline searching tool for accessing citations and links to full-text journals. Tutorials on this Web site are a good source of help in carrying out a search on a particular subject in an easily and efficiently. Other sites that offer links to Medline include Dr. Felix's Free Medline Page (http://www.docnet.org.uk/drfelix/), Healthgate (http://www.healthgate.com/) and (http://www.healthy.net/). The availability of Full text articles for health professionals enhances clinical practice as well as medical research needed to develop the educational institutions and health services in Saudi Arabia.

PROFESSIONAL DEVELOPMENT AND CONTINUING MEDICAL EDUCATION

Using well-selected Web sites for professional development and CME can keep family physicians up to date with their professional obligations and save them time and money. In addition, such Web sites provide suitable educational materials which could be both effective and entertaining. Furthermore, these Web sites are not limited by specific organizations, time or geographical location. Therefore, the Web is a convenient means of professional development and CME especially for those serving in remote areas. Other advantages of the Web are the provision of interactive CME courses, case studies and full text medical books. Academic institutions are the best sources for high-quality content. There is an urgent need for our academic centers to develop relevant educational materials for health professionals.

AAFP Website (http://www.aafp.org/) has practical information useful for family physicians and other physicians. The site includes review articles, CME materials, policy and practice management guidelines, and other useful links. Other valuable sites are the Society of Teachers of Family Medicine (http://stfm.org/), (www.

familypractice.com), Canadian College of Family Physicians (http://www.cfpc.ca/index.htm), Royal College of General Practitioners (http://www.rcgp.org.uk/) and Royal Australian College of General Practitioners (http://www.racgp.org.au/).

Medscape (http://www.medscape.com/home/cmecenter/cmecenter.html) offers thousands of free CME online by specialty and topic. It also provides on line listings of medical conferences with summaries of many medical meetings. Other online CME sites also available free of charge are at (http://www.cmecourses.com/), (http://www.cmegateway.com/), (http://www.cmeweb.com/), (http://www.mdconsult.com/), and (http://www.medcases.com/).

Interactive clinical case presentation is a growing trend on the Web. Text supported by graphics, video clips and feedback heightens the learning process. Interactive patient sites can be accessed at Medconnect (http://www.medconnect.com/finalhtm/intacedu.htm) or Marshall University School of Medicine (http://medicus.marshall.edu/mainmenu.htm).

Family physicians in Saudi Arabia are now able to link on to many online medical journals. Many publishers offer free full text versions, while others need subscriptions or offer limited full text. Family physicians could potentially find useful information in family medicine journals as well as in general journals (e.g. the British Medical Journal, JAMA, Lancet and New England Journal of Medicine, etc). Some of family medicine/practice journals available online are listed in Table 1.

Free journal abstracts via e-mail, a very useful way of keeping up with the growing volume of important medical literature of interest are provided by many medical journals. A useful site that categorizes journal collections by specialty can be located at (http://www.medjet.net/).

Table 1: *Family Medicine Journals available on the Web*

Journal	URL address*	Comments
American Family Physician	http://www.aafp.org/afp	From May 1996, includes tables of contents, searchable abstracts and full text. It is free.
Archives of Family Medicine	http://archfami.ama-assn.org/	From January 1999, includes tables of contents, searchable abstracts and full text, requires free online registration. Ceased publication November-December 2000
Australian Family Physician	http://www.racgp.org.au/publications/index.htm	From May 1999: Tables of contents, abstracts, and some full text.
Canadian Family Physician	http://www.cfpc.ca/	From 1997: Tables of contents and abstracts. Access to full text is available free to CFPC members.
Evidence-Based Medicine	http://www.acponline.org/journals/ebm/ebmmenu.htm	Includes summaries of Evidence-Based articles with commentaries by clinical experts.
Family Medical Practice Online	http://www.priory.com/fam.htm	An on line international peer-reviewed journal of family medicine. Includes tables of contents, full text.
Family Medicine	http://stfm.org/fmhub/fmhub.html	From January 1997. It is the official journal of Society of Teachers of Family Medicine. Free full texts are available from 1998 & abstracts are available only for 1997.
Family Practice	http://www.oup.co.uk/jnls/list/famprj/hdb	Oxford University Press' family practice journal. Includes table of contents, a searchable index and abstracts. Full text is available on prescription. Begins in January 1996.
Family Practice Management	http://www.aafp.org/fmp	From April 1996, includes searchable index of tables of contents and full text. It is free.
Journal of Family Medicine Online	http://www.medical-library.org/j_fammed.htm	An online peer-reviewed journal of family medicine. Includes tables of contents and full text.
Journal of Family Practice (JFP) POEMS collection	http://www.jfponline.com	From December 1999: free, Full text of Patient Oriented Evidence that Matters (POEMs), Complete text of all JFP Journal Club (POEM) reviews.
Journal of Family & Community Medicine	http://www.ssfcm.com	From 1997, contains compressed files of tables of contents and abstracts but limited full text. It is free.
Journal of the American Board of Family Practice	http://www.abfp.org/journal.htm	From 1998, contains full text at Family Practice.com. From 1997, full text is available at Medscape which requires free registration.
The Journal of Family Practice	http://www.phypc.med.wayne.edu/jfp/jfp.htm	Includes table of contents and full text. Contains reviews and critical appraisals of JFP Journal Club as well as recommendations for clinical practice. It also contains useful links for family physicians.

*URL: the Uniform Resource Locator

There are Websites designed to give collections of medical journal instructions to authors for the submission of manuscripts. This service is offered at (http://www. mco.edu/lib/instr/libinsta.html). Arab Doctor's Net (http://www.arabdoctors net. net/newjournal.htm) provides names and addresses of a variety of medical journals published in the Arab world.

A range of medical calculators is accessible on the Internet to help health professionals in their day-to-day practice. A variety of medical calculators on a wide range of topics such as epidemiology, body mass index, pregnancy, diabetes/insulin, and breast cancer risk is available at (http://www.medic8.com/medicaltools.htm).

MEDICAL EDUCATION

The use of the Internet is a potential source to support for the improvement of medical education. The work of medical schools is to strive to produce competent physicians capable of being life-long learners, educator-communicators, clinicians, researchers and managers.[24] Medical informatics is an important support for the diverse roles of physicians[25] and should be given an adequate place on the medical school curriculum. A medical student who has basic medical informatics skills can access his college curriculum, syllabus, educational materials, timetable and other available resources to help his education. Many medical with varying levels of accessibility are now on the web, offering a diversity of content.

It is essential for family practice residents to acquire the essential medical informatics skills for their day-to-day practice. AAFP recommend curriculum guidelines in medical informatics and computer applications at (http://www.aafp.org/edu/guide/rep288.html).[26] The guidelines outline the essential knowledge, skills and attitudes to be mastered by the residents and the way

they can be utilized. It is important that every medical school and family practice residency should teach its medical students and residents medical informatics competencies including the Internet tools for accessing, and how to appraise and manage medical information critically.

Many Web sites today offer a variety of information through different residency programs or vocational schemes. Information about family practice residencies/general practice scheme programs and departments of family medicine/general practice and primary health care can be accessed through any search engine or directly through relevant organizations such as AAFP.

EVIDENCE-BASED MEDICINE

Since the application of Evidence-Based Medicine (EBM) is a necessary component of modern family practice, the Web with its huge medical database is a potential source of facilitating that practice. By adapting Patient-Oriented Evidence that Matters (POEMs) in reviewing articles on common primary care problems, family physicians would effectively change their practice.[27,28]

Best Web sites for EBM can be accessed through the Journal Club of American College of Physicians (http://www. acponline.org/journals/acpjc/jcmenu.htm) and EBM of the United Kingdom Center for Evidence-Based Medicine (http://cebm.jr2. ox.ac.uk). Two other important Web sites for EBM are the Journal of Family Practice POEMs (http://www.jfponline.com/) and the Cochrane Collaboration Library (http://www.medlib.com) or (http://cochrane.hcn. net.au/).

These sites contain peer-reviewed abstracts from biomedical journals scrutinized for the research quality and level of evidence. The abstracts also include summaries of evidence-based articles with commentaries by clinical experts. Principles

of EBM are used in the abstracts to support the evidence by reporting important findings such as number needed to treat, number needed to harm, relative and absolute risk reduction, odds ratio and confidence interval.

PATIENT INFORMATION

Although there are substantial numbers of patient education materials on the Web sites, there is a dearth of Arabic materials. The provision of health care by family physicians in Saudi Arabia is mostly to patients whose primary language is Arabic. There is therefore a need to have reliable patient education materials in Arabic. Family physicians are ideally placed to develop, maintain and update suitable Web-based information materials for their patients and their families. Some drug companies, health magazines and health-related Arabic Web sites provide a variety of patient information materials. Data on the reliability of the health information posted on these sites are unfortunately not available.

Since family physicians have to provide personal care to a culturally diverse group of patients, education materials should also be available in the languages that are commonly encountered in family practices in Saudi Arabia. Several Web sites provide multilingual patient education resources. Multilingual information about immunization and vaccination can be found at (http://www.immunize.org/). Information at this site is reviewed for reliability and accuracy by the Centers for Disease Control. Other Web sites that offer multilingual patient information materials are located at (http://www.familydoctor.org/) as well as (http://www.drpen.com/).

Some of the online health resources useful for patients are accessed at the AAFP's Health Information for Patients (http://familydoctor.org/), Medical Matrix:

Patient Education (http://www.medmatrix.org/_SPages/Patient_Education.asp), MEDLINEplus (www.nlm.nih.gov/medlineplus), the Internet Drug Index (http://www.rxlist.com/), HealthAnswers (http://www.healthanswers.com/), and Hardin Meta Directory of Internet Health Sources (http://www.arcade.uiowa.edu/hardin-www/md.html).

Another valuable service that the Internet offers is the provision of suitable social resources to help family physicians in assisting their patients and their families to solve social problems that are encountered. For example, charitable or volunteer organizations can offer a wide range of resources for low-income patients at their Web sites. An example of Web sites providing access to low cost or free medications in United States is offered by (http://www.needymeds.com/).

CONCLUSION

Family Medicine is a specialty that deals with the care of a wide spectrum of individuals and members of families regardless of their age, gender or specific problems. A wide range of technology is needed to support the role of family physicians as caring, trusted and competent clinicians.

Besides the challenge posed by the expansion of the new electronic resources on the Internet and the Web, the paucity of local Internet resources and the inadequacy of their numbers are some of the current problems facing family physicians in Saudi Arabia.

The Internet creates a valuable opportunity of raising the standard of family practice through increased access of family physicians' and the community to information to an international standard of care. Thus, there is a need to encourage family physicians in Saudi Arabia to be in the front of effort to create, develop and
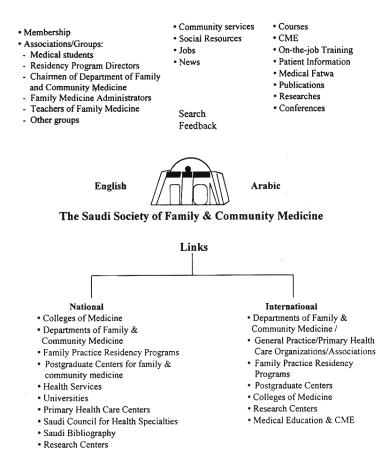
- Membership
- Associations/Groups:
  - Medical students
  - Residency Program Directors
  - Chairmen of Department of Family and Community Medicine
  - Family Medicine Administrators
  - Teachers of Family Medicine
  - Other groups

- Community services
- Social Resources
- Jobs
- News

Search
Feedback

- Courses
- CME
- On-the-job Training
- Patient Information
- Medical Fatwa
- Publications
- Researches
- Conferences

English   Arabic

The Saudi Society of Family & Community Medicine

Links

National
- Colleges of Medicine
- Departments of Family & Community Medicine
- Family Practice Residency Programs
- Postgraduate Centers for family & community medicine
- Health Services
- Universities
- Primary Health Care Centers
- Saudi Council for Health Specialties
- Saudi Bibliography
- Research Centers

International
- Departments of Family & Community Medicine /
- General Practice/Primary Health Care Organizations/Associations
- Family Practice Residency Programs
- Postgraduate Centers
- Colleges of Medicine
- Research Centers
- Medical Education & CME

Figure 1: *Proposed home page for the Saudi Society of Family and Community Medicine*

maintain quality Web sites based on the values of their discipline. It is equally important to provide training in medical informatics to family physicians to enable them to critically appraise the validity and reliability of medical information to their practice. In addition, family physicians in Saudi Arabia should participate in integrating the best available evidence for primary care practice and make this evidence easily and rapidly accessible at the point of care.

In last three years, the Internet has grown rapidly in Saudi Arabia. The expansion of Internet services and the creation of web sites for Saudi universities, medical organizations, the accreditation body, and the SSFCM are great achievements. However, there is much to be done to improve quality educational and medical sites.

Family medicine organizations (in particular, the SSFCM) are expected to have more active role in creating relevant,

reliable and easily accessible Web pages for family physicians and the population at large. Suggested improved site for the SSFCM is shown in figure 1. It is also important for health services, medical colleges and family practice residency programs to provide high quality and up-to-date medical Web sites to their consumers as well as the rest of the society.

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