

COMMENTED SUMMARIES FROM CURRENT MEDICAL LITERATURE

ONLINE HEALTH INFORMATION IN DEVELOPING COUNTRIES: CHALLENGES AND SOLUTIONS

Summary: Information and communication technologies have not been harnessed systematically to improve the health of populations in developing countries. These technologies empower those who use information by providing them with a choice of information to be accessed in their own time and by allowing them to put their own information on the web. The current digital divide is more dramatic than any other inequity in health or income. The quality of health information available on the web is inconsistent, and the visibility of research from developing countries is limited. The way forward is to exploit the full interactivity of the Internet, which allows rapid feedback and change to continuously mould information into useful knowledge.

Comment: The Internet is one of the fast-growing ways of disseminating health information throughout the world for both public (consumers) and healthcare professionals. It is assumed to be inexpensive, available and to provide accurate and free information to people all over the world. But reality seems to be different. Developing countries do not actually benefit from the Internet, especially when it comes to health information and there are several obstacles and challenges which must be recognized and overcome by authorities in the developing world. There are five major points in Edejer's articles published in *BMJ*.

The term "digital divide" refers to the inaccessibility of the Internet and proper modern communication in developing countries. There is a very fast growing trend in Internet Service Providers (ISP) in developing countries, and in some rural areas people have started to have access to the Internet. But still it is far from the standards that prevail in developed countries. Even if the phone lines, ISPs and the computers are available, people have very limited skills to use computers and to retrieve health information. Even in great metropolitan areas like Tehran, the Internet is assumed to be a luxury for people in the high middle class and upper class.

Although anyone or any organization in the developing countries can set up a Website to disseminate health information, we see there are very few Websites dedicated to this important issue. Actually, most of those who own a website provide information about their organizations and research projects and seldom consider their missions as information providers for the public health information consumers. For example, the Iranian Ministry of Health and Medical Education's Website (<http://www.hbi.dmr.or.ir/>) provides extensive links to health and medical information specifically designed for healthcare professionals, but there are no pages developed for public about general health topics. The same is true for other Websites sponsored by the research centers or medical universities, and by private medical Websites.

World Wide Web does not provide reliable and accurate information all the time. As anyone with any level of education can host a Website and put information in it, there is no guarantee that what we retrieve is reliable. Consumers do not normally have the proper insight to distinguish good information from bad information, and what they read on the Net might be misleading sometimes. Moreover, contents of the health information Websites are oriented towards the needs and conditions in the developed world and are not culturally and epidemiologically adjusted for developing countries. The science that is produced from the South countries is not indexed properly in indexing systems and the people and even healthcare professionals have much difficulty accessing information concordant with their local needs. Such information, if any, is obscured and invisible on the Net and well-known health information websites (like PubMed or PubMed Plus) do not carry such information from and about the developing countries.

Another important obstacle in providing online health information for the public is the language barrier. Most of the people in developing countries are not able to comprehend health information very well in English, which is the number one language for high quality health information. There are Spanish translations for some major health information Websites (which could be of much use for Spanish speaking people in Latin

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America) but many nations in the Middle East, Southeast Asia and Central Asia cannot use such Websites and the information is not adjusted to their cultures; therefore, simple translation to their native languages would not solve this problem.

In terms of the quality of the design, one can say that the developing countries do have a remarkable number of Web designers and Web developers who are capable of creating pages with high usability and user-friendliness. These developers have contributed so far to the development of many Websites and have overcome the problems of publishing in non-Roman fonts (e.g. Arabic or Persian) on the Net. It is quite obvious that there would be few technical problems if proper funds are directed to the development of online health information Websites. What we lack is the proper content of such sites.

Online health information is a very good option to provide authorized information to all areas that have access to telephone lines and computers. There are hundreds of millions of people who already could have Internet access but there is no reliable and locally developed material for them to use. It is highly recommended that developing countries' governments set priorities for developing independent Websites which provide guidelines and essential health information for the public in their own languages. The consumers for such Websites would be urban residents first, but soon the infrastructure would be available throughout the nation with distribution comparable to major media like National Television and Radio. Considering the limitations of mass media in providing information about sensitive health topics (e.g. reproductive health and HIV infection), it is of utmost importance to educate all layers of the society, especially the youth, with this major private media. The content of such Websites must be written by local health information writers and categorized for different genders, ethnic groups and all age groups. The language must be easy to understand and accompanied with images and simple animations, if necessary. Mass media could help the Ministry of Health and Medical Education to publicize such Websites and to introduce it on a National level. Medical universities, academies and subspecialty societies could be consulted for the development of reliable, proper and culturally pertinent content.

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Source: Edejer TT. Disseminating health information in developing countries: the role of the internet. *BMJ* 2000; **321(7264)**: 797–800.
