E-MEDICAL INFORMATION TOOLS AND THEIR UTILIZATION BY HEALTH STAFF IN SENEGAL

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Introduction

Senegal is a Western African country which official language is French. It covers an area of 196.722 km2. The total population is estimated at 9.278.617 inhabitants.

Existing specialized libraries and other information centers in all fields of development permit to users to have access to information many years ago.
Electronic tools which have been expanding now offer to institutions and to users opportunities to easily access to relevant information.
Medical university community constitute users for whom information services in general and electronic tools in particular must to be frequently used in the achievement of their activities.

Electronic information and Internet in Senegal

In our context, the term "electronic information" is defined as "<u>all types of information available on CD-ROM and Internet</u>", even if it could contain more than these kind of information.

In Senegal, the use of CD-ROM has been noticed in many libraries during the eighteens. A study which consisted of an inventory of existing CD-ROM sites initiated by UNESCO in 1992 revealed a number of 53 organisations in which CD-ROM are intensively used for information researches.

Among numerous CD-ROM used in accessing to health information, we can name the followings which are well known:

- POPLINE: produced by Johns Hopkins University / Center for Communication Programs, United States;
- MEDLINE: produced by the National Library of Medecine (NLM), United States;
- PASCAL: produced by the Social Sciences National Research Center (CNRS), France.

Some Information centers have access to "online electronic journals" programs such as IDEAL, HINARI, AJOL.

The country has telecommunication infrastructures which enable the launching of Senpac network in September 1988. Senpac contributed to the development and utilization of Minitel destined to access to online francophone databases.

The following figures give an idea of available electronic information in Senegal:

- Number of Cybercafes in Dakar = 59
- Cost of Internet access in Cybercafes = 500 FCFA/hour
- Number of Internet Service Providers (ISP) = 20
- Number of Internet users subscribed to ISP = 15.000
- Number of private telecenters = 6796

Dakar University is an ISP with more than 500 subscribers. AUPELF/UREF which is located in the University space, is also an ISP with more than 1034 subscribers. These two ISP offer to university community opportunities to share, exchange or find information relevant to their needs.

Even if people began to use Internet services some years sooner, the Senegalese's official date of Internet access is March 1996.

Background of the study

A research related to Internet's utilization by medical staff from Dakar University was implemented between October 2001 and June 2002.

To achieve this research, a questionnaire was imagined and distributed to these kinds of people:

- Medical students from second and third level in medical department of the University;
- Medical researchers and teachers from the same institution.

The questionnaire aims to determine which kinds of people use Internet the most? what finalities informations found are destined? what are users level of knowledge about Internet? what types of informations are used the most?…

Kinds of Information users

100 questionnaires were sent to users from medical department of University in different places.
The 76 users who responded to the survey are composed of:

- Students = 65,8%
- Researchers/Teachers = 10,5%
- Physicians = 21,1%
- Pharmacists = 2,6%

. 36,8% of these users are from medicine area
. 18,4% are from pharmacy area
. 3,9% are from odontology/stomatology area

Other users named specific fields areas such as surgery, paediatrics, gynaecology, cardiology.

These different information users have mainly activities in medical department of Dakar University, hospitals, public health centers, drugstores, private health centers.

Users knowledge related to Internet

The survey revealed that 32,9% of users have some knowledge about Internet. Research tools and other websites specified by them can be listed as below:

- Google
- Altavista
- Yahoo
- Lycos
- Pubmed
- Site of NLM
- Medisite
- Copernic

In these different tools, users cited as above usually do information researches according to their needs
Other users - who have not knowledge about Internet's utilization - are assisted by reference librarians who do researches for them

Utilization of Information provided from Internet

Information retrieved by users are essentially destined to satisfy the following needs:

- Thesis writing for preparation of students thesis or high study diplomas for physicians and pharmacists who want to be specialized;
- Documentary researches in order to be informed about news in their domains areas;
- Publications writing so as to publish research results or reports in reviews;
- Personal information in order to better face their health cares activities;
- Courses preparation for teachers who usually offer courses to students;
- Communications at congresses and seminars at which many researchers and teachers sometimes take part so as to exchange knowledge;

Types of information which are mostly consulted by users are Bibliographic references, publications in full text, statistic data, images.

Evaluation of Information found in Internet

Most part of users declared to be satisfied of information from Internet found in their needs case. The figures as below show how satisfied they are.

- 46,1% of users found information "very useful"
- 30,3% of users found information "useful"
- 2,6% of users found information "enough useful"
- 21% of users did not give their appreciations

The appreciations of Information from Internet are confirmed by the real interest users have about Internet services. The study revealed that 75% of people concerned frequent other private Internet centers such as Cybercafes, AUPELF/UREF.

Conclusion

This survey - which confirmed interest of medical staff about Internet services and electronic tools – also revealed the two main problems:

- Training for final users in order to enable them to better exploit adapted e-medical tools and appropriated information. 97,7% of users declare their needs of training;
- Training for librarians and other communication professionals who help final users to access to needed information.

Importance of health in the economic and social development of society must conduct professionals involved in these issues to regularly access to appropriated information.

Electronic information resources and Internet services constitute adapted means to face the problem of information's access.