HIV/AIDS electronic information resources: a profile of potential users*

By Jeffrey T. Huber, Ph.D.
Research Information Scientist

Nunzia Bettinsoli Giuse, M.D., M.L.S.
Director

Active Digital Library
Eskind Biomedical Library
Vanderbilt University Medical Center
Nashville, Tennessee 37232

Information about HIV/AIDS is produced, used, and distributed at the individual, organizational, local, regional, national, and international levels. Electronic sources of information constitute a key component of the body of knowledge concerning HIV/AIDS. While efforts are under way to promote the use of HIV/AIDS electronic information resources, little has been done to evaluate the current status of potential users' awareness of these products. The purpose of this study was to assess familiarity with electronic sources of HIV/AIDS information.

METHODOLOGY

Information consumers and providers within the AIDS arena have diverse educational and professional backgrounds. To enhance understanding of their level of familiarity with HIV/AIDS electronic information resources, a survey was mailed to individuals affiliated with agencies, institutions, and organizations known to consume or disseminate information concerning the disease. AIDS service providers within a fifty-mile radius of Nashville, Tennessee, were identified by using the Resources and Services database within the Centers for Disease Control and Prevention (CDC) National AIDS Clearinghouse online system. In addition, individual physicians who regularly see HIV-infected patients were identified through local referral resources.

The survey form was divided into two sections. The first section asked for demographic information, such as respondents' educational background and field of specialization. The second section asked about respondents' use of computer applications and interfaces ranging from general-purpose applications such as e mail, word processing programs, and spreadsheets to more focused resources such as biblio-

* This work was supported in part by NIH/NLM contract N01- LM-5302 and in part by an IAIMS grant (2 G08 LM05443-03) from the National Library of Medicine.
graphic or factual databases. Electronic resources included in the survey were limited to those available from the National Library of Medicine (NLM), the CDC National AIDS Clearinghouse, and the Internet (e.g., World Wide Web, Gopher, File Transfer Protocol [FTP], Telnet). The second section employed a seven-point Likert-type scale to gauge familiarity with computer use and electronic resources. The scale was graded from “low” to “high” with one indicating low, four average, and seven high.

Seventy-nine completed surveys were returned of 189 mailed, yielding a 42% return rate. Surveys were considered to be complete if they contained information reflecting an awareness of electronic resources. Missing demographic information was recorded as N/R, for no response.

RESULTS

Results of the survey indicated that the majority of respondents had attended college and most had completed at least a bachelor’s degree. In fact, almost half had earned a master’s degree (n = 35 or 44.3%), and a small percentage (n = 10 or 12.7%) had completed a doctorate. Most participants had achieved a level of education well beyond a high school diploma.

Fields of specialization varied among respondents. The area of specialization with the greatest representation was counseling (n = 19), including fields such as family studies, psychology, and social work. Other fields with significant representation included nursing (n = 16), library and information science (LIS) (n = 8), and medicine (n = 7). Other categories selected by more than one respondent were communications (n = 3), health care marketing and administration (n = 3), medical records administration (n = 2), and education (n = 2). Fields of specialization with a single respondent were grouped into an “other” category. These included business administration, English, home economics, ethics, epidemiology, theology, biochemistry, paramedical work, and physical facilities operations. Ten surveys were returned with no response to the question regarding specialization.

Responses regarding the use of computers indicated that 73% of respondents (n = 58) considered themselves to possess above-average familiarity with word processing programs. Familiarity with spreadsheets was much lower, with 81% indicating average or below average. Experience with e-mail was much more evenly distributed. Forty-five percent of respondents noted below-average familiarity, 13% average, and 42% above average.

A logical extension of the use of e-mail is the accessing of information via the Internet. Diverse information resources are available through the Internet by using Telnet and FTP or Gopher servers and the World Wide Web, and the number of HIV/AIDS-related Internet sites is growing rapidly. For this reason, Internet use was included in the survey. Although Telnet is the most common remote log-on method for connecting from one host to another over the Internet, 74.7% of respondents (n = 59) rated themselves as having little familiarity with this application. Similarly, 91.1% of respondents (n = 72) indicated having below-average familiarity with FTP. Gopher servers were used more widely, with 11% of respondents (n = 9) claiming to have average or above-average familiarity; and the World Wide Web even more so, with 13% (n = 10) indicating average or above average.

Questions concerning information-specific resources addressed familiarity with MEDLINE to determine a baseline for use of common biomedical databases. Although the majority of respondents (n = 53) rated their familiarity with MEDLINE as below average, 33% (n = 26) indicated average or above average, with 9% of the total (n = 7) at the high end of the scale. AIDSLINE was used less frequently than MEDLINE, with 84% of respondents (n = 66) claiming below-average familiarity with the product, 7% (n = 6) average, and 9% (n = 7) above average. AIDSTRIALS and AIDSDRUGS were not well known, with 91% of respondents (n = 72) noting below-average familiarity with the two products. Knowledge of National AIDS Clearinghouse databases proved slightly higher, with 5% of respondents (n = 4) indicating average and 14% (n = 11) above-average familiarity.

DISCUSSION AND CONCLUSION

On January 25, 1994, NLM announced free access to its HIV/AIDS-related databases (i.e., AIDSLINE, AIDSTRIALS, AIDSDRUGS, and DIRLINE) within the United States, effective immediately [1]. The announcement came in response to a recommendation resulting from the HIV-AIDS Information Services Conference hosted by NLM in June 1993. The invitational conference included participants from community-based organizations who stressed that access fees for HIV/AIDS information were prohibitive for already strained budgets. In addition to offering free access to its HIV/AIDS-related databases, NLM announced on May 9, 1994, the availability of funds for community-based organizations and for encouraging creative partnerships among HIV/AIDS information providers [2]. The funding was made available to facilitate access to HIV/AIDS information resources. In a similar vein, the National AIDS Clearinghouse has been providing free access to HIV/AIDS-related information since its inception in 1987 [3].

Although not heavily affected by HIV infection at present, Nashville and the surrounding area are representative of much of the country in terms of the status of the epidemic. While Nashville is home to a
variety of industries, including major educational institutions and medical facilities, the city is surrounded by rural communities. As the state capital, Nashville serves as a central resource for both the private and public sectors. Nashville also has the second-highest number of documented AIDS cases among Tennessee cities. HIV/AIDS is no longer a problem limited to large metropolitan areas, such as New York or Los Angeles; the impact of the disease ripples throughout middle America as well.

Information is a key resource in the effort to stem the spread of HIV infection, facilitating the efficient delivery of health care to those already infected and fostering empathy toward individuals affected by the disease. Electronic sources of information represent a major step toward universal access and timely dissemination. Although efforts to facilitate access to that information are being made, results of the present study indicated that individuals working in this field have a less than complete familiarity with electronic HIV/AIDS information resources.

While the survey results were based on self-reported data, limited by the number of surveys returned, and bound by individual interpretation of terminology, they still indicated a need to inform and educate consumers of HIV/AIDS information about the availability and applicability of electronic resources. Although much HIV/AIDS information is available free of charge within the United States, accessibility does not ensure its use—even by individuals actively engaged in the HIV/AIDS arena. HIV/AIDS information consumers must be informed and educated where electronic resources are concerned. Simply making the information available is not enough, as was evident in the responses to questions regarding HIV/AIDS-specific electronic information resources.

The need to demonstrate the use and applicability of resources becomes even more apparent upon closer examination of the survey responses of physicians who regularly see HIV patients and of LIS professionals. Only one physician indicated above-average familiarity with AIDSLINE. No physician reported above-average familiarity with either AIDSDRUGS or AIDSTRIALS. The majority of LIS professionals \( n = 5 \) indicated below-average familiarity with AIDSLINE, and all reported below-average familiarity with AIDSDRUGS and AIDSTRIALS. Knowledge of National AIDS Clearinghouse databases was no better, with LIS professionals (all indicated below-average familiarity) faring only slightly better than physicians (57% reported below-average familiarity).

REFERENCES


Received September 1995; accepted February 1996