Web-accessible medical literature database use of Japanese healthcare professionals: analysis based on log information of “Ichushi-Web”

Mami Matsuda, Toshinori Kurosawa, Minoru Ikusaki, Atsutake Nozoe  
NPO Japan Medical Abstracts Society, Tokyo

Objective

“Ichushi-Web” is a domestic medical literature database service provided by NPO Japan Medical Abstracts Society, which is most frequently used in Japan.

Coverage: medicine and other allied health disciplines from 2,700 domestic journals

- About 6.7 million bibliographic data
- Provided to about 2,000 institutions - research and educational institutions, hospitals, for-profit companies such as pharmaceutical companies, public libraries, etc.

The purpose of this study is to analyze log information of “Ichushi-Web” users, and thus review the current status of database use, links to electronic journals, and links to OPAC or Link Resolver.

Methods

The access information was extracted from log files stored on the “Ichushi-Web” server.

Daily and yearly distribution of login, and the number of click-on the links to electronic journals and to OPAC or Link Resolver were analyzed.

The information regarding optional settings such as linkage to OPAC or Link Resolver, which are customized by each users’ organization was also obtained and examined.

Results

Usage of Ichushi-Web

- Daily number of login

Utilization of “Ichushi-Web” service has been growing year by year. The average daily number of login during the weekdays in October 2008 was nearly 14,000.

- Yearly distribution of login

Objective: To examine the daily and yearly distribution of login on users’ sector basis.

Usage - on a sectoral basis

- Daily and yearly distribution of login were examined on users’ sector basis:
  - A: research and educational institutions
  - B: hospitals
  - C: for-profit companies such as pharmaceutical company
  - D: others

- Daily distribution of login

The number of daily login from (A) reached its peak at 4:00 p.m., distribution of which was characterized by a nearly bell-shaped curve with a remarkable drop at 12:00 p.m. Whereas, those of (B),(C),and (D) varied less greatly during the daytime.

- Yearly distribution of login

The data of login from (A) showed a distinct bimodal distribution with peaks in May/June, and October. As for the other three sectors, namely, (B),(C),and (D), much less seasonal fluctuation was seen.

Links to Electronic Journals

- About 1.9 million citations in “Ichushi-Web” are linked to electronic full-text or bibliographic data in external sites. Nearly 1.2 million citations out of the total records are linked to the full-text article.

- The cumulative number of links to Electronic Journals – every year

The average monthly number of users’ clicking on the links to electronic journals was about 170,000. (January through December 2008)

- Number of clicking on links to Electronic Journals - monthly

The average monthly number of users’ clicking the links to electronic journals has been increasing in every year after year.

- Number of clicking on links to Electronic Journals by type of article and Service Provider

The analysis of the log information about users’ clicking on the links to access electronic articles showed that the users more often viewed “Review Articles”- including introductory articles in commercial journals.

Conclusions

- As many as 14,000 people are estimated to make active use “Ichushi-Web” each day.

- The seasonal and daily fluctuation with significant peaks were seen in “Ichushi-Web” utilization by colleges or research institutes.

- The analysis of the log information about users’ clicking on the links to access electronic articles showed that the users more often viewed “Review Articles”- including introductory articles in commercial journals.