

ABSTRACT

Thesis Title : Information Storage and Access to Tropical Medicine
Research of Mahidol University via Information Networking
System

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The purposes of this research were to (1) collect research papers in tropical medicine undertaken by Mahidol University; (2) create indexes to be used as a tool for information access to research papers in tropical medicine; (3) analyse and design information storage for research papers in tropical medicine in order to distribute that information via an information networking system; (4) study and compare users' satisfaction related to their status and educational level towards tools and means either of information storage or access to research papers in tropical medicine; and (5) study users' problems and obstacles of information access to those research papers.

This research analysed 345 published and unpublished research papers in tropical medicine undertaken by Mahidol University staff during the period 1994-1998. Each research paper was assigned subject headings and keywords corresponding to the Medical Subject Headings. The bibliographic descriptions of

research papers were entered into the TMR database using the CDS/ISIS program conforming to US MARC standard and then were processed into information outputs which were able to be sorted by author, title, subject, keyword and journal title. The outputs were modified into HTML format and loaded into the web server.

Users' satisfaction on information retrieval from the homepage of research in tropical medicine undertaken by Mahidol University was evaluated through questionnaires, which were distributed to a sampling population comprised of 118 users who were faculty staff, scientists, researchers, graduate students and doctoral candidates in the Faculty of Tropical Medicine, Mahidol University; the population was selected through stratified random sampling. Statistics used for data analysis included frequency, percentage, mean, standard deviation, One-Way analysis of variance and independence f-test.

Major findings and conclusions included :

1. A database of 345 research papers in tropical medicine in Mahidol University was obtained.
2. Migration of the original format of bibliographic data in CDS/ISIS to HTML format for World Wide Web presentation was carried out successfully.
3. A large number of users was satisfied with the information tools, information storage and information access to research papers in tropical medicine at a high level. Problems and obstacles of use and access to information on the web were found at a lesser level.
4. Test of hypothetical satisfaction with the design of homepage for information storage and information access of research papers in tropical medicine showed that the status level of users had no significant association with use

satisfaction. The students who hold master degree satisfied with the layout of the homepage more than the students who hold bachelor degree at a significant level of difference at 0.05.

5. Test of hypothetical satisfaction with the information tools, information storage and information access to research papers in tropical medicine showed that there were both differences in satisfaction related to the status and educational level of users. The faculty staff showed grater satisfaction in terms of output retrieved using assigned keywords than the students with a significant level of 0.05. Besides, the students who hold master degree showed greater satisfaction with the output of information retrieved utilising assigned keywords and full display of records than the students who hold bachelor degree at a significant level of 0.05.