

## DEPARTMENTS / DÉPARTEMENTS

### Editor's message

The years teach much which the days never know.

Ralph Waldo Emerson

In many ways, I think the quote above sums up my experience as Assistant Editor and Editor of the *Journal of the Canadian Health Libraries Association* (JCHLA) over the past 2 years. This issue of JCHLA is my last as Editor, and as I turn the page on this “chapter” of my professional experience, I feel compelled to convey my wonderful learning experience.

Not only have I made new connections and friendships in the health field arena, but I have vastly improved my understanding of health sciences librarianship in Canada and the complexities of working on the board of a national profes-

sional organization. I have honed my writing and editing skills and have been able to do so by staying informed of current events in our field both in Canada and around the world.

There are many exciting initiatives underway for the journal, including open access issues, digitization of *Bibliotheca Medica Canadiana* (BMC) back to its inception, and developments in the area of vendor sponsorship for JCHLA.

My experience has been very enriching, and I would like to take this opportunity to thank the Canadian Health Libraries Association Board, Karen Neves, Andrea Hodgson, and incoming Editor Sandra Halliday for their unwavering support.

See you in Vancouver next May!

Cheers,  
**Rebecca Zakoor**



## DEPARTMENTS / DÉPARTEMENTS

### A word from the President

Welcome to 2006. I hope everyone had a good holiday season. One of my resolutions for the new year is to pay more attention to the details. I got off to a slow start in my year as president; I missed the deadline for my first "A word from the President" in the previous issue of the *Journal of the Canadian Health Libraries Association / Journal de l'Association des bibliothèques de la santé du Canada* (JCHLA / JABSC). My excuse is conference "planning'itis", and a summer focused on the installation of a new, replacement library system. Now the conference is a distant memory, and the new system is up and humming.

Congratulations to the organizing committee of the Toronto 2005 Canadian Health Libraries Association / Association des bibliothèques de la santé du Canada (CHLA / ABSC) Conference. I think I speak for all of us on the Planning Committee when I say that, after 2 years of planning, the days of the conference just seemed to fly by. I look forward to being an attendee at the 30th Annual Conference being hosted in Vancouver, 12–16 May 2006. The theme, befitting our 30th anniversary, is "Pearls of Wisdom". Have you added your thoughts yet to the "Memories of CHLA / ABSC 1976–2006 Blog"?

For all of those chapters who have been involved in planning a CHLA / ABSC conference, you will be pleased to hear that CHLA / ABSC Board Member Linda Slater has completed the herculean task of converting the paper-based Conference Planning Manual into a Word document. Past and future planners also will be pleased to hear that in the process of converting the manual, Linda managed to incorporate the recommendations from past planning committees. The old manual served us well, but its existence as a paper-based manual meant there could be no updates of the timelines, procedures, and sample documents. Planning committees recorded their recommendations in reports that were passed on to the next group. As plans for the next conference were already well under way by the time the report for the most recent conference was completed, the report was really of more use to the group planning the conference to be held in 2 years time! We hope that having the manual in an electronic format will encourage each conference planning committee to add its own recommendations based on their planning ex-

perience to help guide the next set of intrepid conference planners.

The Task Force on Hospital Library Standards has been working hard at reviewing and revising the CHLA / ABSC Standards for library and information services in Canadian health care facilities. A draft of the newly revised standards was presented to the Board for comment at the Fall meeting. A copy also was posted on the CHLA / ABSC Web site to elicit feedback from members.

The National Network of Libraries for Health / Réseau national des bibliothèques pour la santé (NNLH / RNBS) Task Force continues to work toward realizing a vision of a nationwide network of health libraries that will ensure all health care providers in Canada will have equal access to the best information for patient care. Based on feedback from a very successful Stakeholder meeting in June 2005, and from attendees at the 2005 Conference, the Task Force has been focused on the creation of a business plan for the development of a National Network of Libraries for Health / Réseau national des bibliothèques pour la santé. A commitment of funding from participants of the Stakeholder meeting meant that a request for proposal could be issued to engage the services of a consultant to draft the business plan. For an update on the status of the business plan, please be sure to view the NNLH / RNBS Web site.

At the request of members, CHLA / ABSC has written a letter to advocate in favour of continuing the special Library Book Rate (LBR) agreement between Canada Post and the Department of Canadian Heritage. The LBR is a discount postal rate that was introduced in 1939 to facilitate interlibrary loans. It provides all Canadians with equal access to literature regardless of where they live.

To conclude, I would like to say thank you to Rebecca Zakoor who has, with this issue of JCHLA / JABSC, completed her term as Editor. It has been a year of working through the last kinks in the change from a print to an electronic journal. Rebecca has weathered it well. Sandra Halliday has now taken over the reins of Editor. Gillian Griffith has stepped into the position of Assistant Editor.

**Tamsin Adams-Webber**

CHLA / ABSC President, 2005–2006



## DÉPARTEMENTS / DEPARTMENTS

### Le mot de la présidence

Bienvenue en 2006. J'espère que chacune et chacun ont passé une agréable période des Fêtes. Une de mes résolutions pour la nouvelle année est de porter davantage attention aux détails. J'ai débuté plutôt au ralenti mon année à la présidence — j'ai manqué la date de tombée de mon tout premier « le mot de la présidence » dans le numéro précédent du *Journal de l'Association des bibliothèques de la santé du Canada / Journal of the Canadian Health Libraries Association*. Mon excuse est la planification du congrès et un été centré sur la mise en place d'un nouveau système de remplacement de bibliothèque. Maintenant, le congrès fait partie de ma mémoire et le nouveau système baigne dans l'huile.

Félicitations au Comité organisateur du congrès 2005 de l'Association des bibliothèques de la santé du Canada / Canadian Health Libraries Association (ABSC / CHLA) de Toronto. Je crois bien traduire la pensée de chaque membre du comité en disant qu'après deux ans de planification, les jours du congrès ont semblé bien courts. Je contemple avec joie la perspective d'assister au 30<sup>e</sup> congrès annuel à Vancouver, lequel se tiendra du 12 au 16 mai 2006. Le thème tout à fait digne de notre 30<sup>e</sup> anniversaire est « Perles de sagesse ». Avez-vous ajouté vos idées et commentaires à ce jour au blogue de l'ABSC / CHLA des « Souvenirs de l'ABSC / CHLA de 1976 à 2006 »?

Toutes ces personnes des chapitres qui ont été impliquées dans la planification du congrès de l'ABSC / CHLA seront heureuses d'apprendre que Linda Slater, membre du Conseil d'administration, a complété la tâche herculéenne de conversion du manuel de planification des congrès sous format papier au format électronique en document Word. Tant les planificateurs des congrès précédents que ceux des congrès à venir se réjouiront de constater que Linda a réussi à y incorporer les recommandations des comités de planification antérieurs. L'ancien manuel nous a bien servis mais son format papier rendait difficile la mise à jour des échéanciers, des procédures et des exemplaires de documents. Les comités de planification y ont consigné leurs recommandations au profit des groupes qui leur ont succédé. Puisque la planification pour le prochain congrès était déjà bien amorcée au moment où le rapport du tout dernier congrès a été rédigé, le rapport a été bien davantage utile aux planificateurs du congrès qui se tiendra dans deux ans. Nous espérons que le fait d'avoir le manuel sous format électronique encouragera chaque comité planificateur des congrès à ajouter ses recommanda-

tions à partir de son expérience, aidant ainsi à guider les équipes de futurs planificateurs intrépides.

Le Comité de travail sur les normes des bibliothèques des hôpitaux a trimé dur à l'examen et à la révision des Normes pour les centres de documentation des établissements canadiens de santé. Une ébauche des nouvelles normes révisées a été présentée au Conseil d'administration lors de sa réunion de l'automne. Une copie en a aussi été publiée dans le site Internet de l'ABSC / CHLA aux fins d'obtenir les réactions et commentaires des membres.

Le Groupe de travail du Réseau national des bibliothèques pour la santé / The National Network of Libraries for Health (RNBS / NNLH) continue ses efforts visant à réaliser la vision d'un réseau d'envergure nationale de bibliothèques de la santé qui assurera que tous les intervenants en santé au Canada auront un égal accès à l'information la meilleure pour le soin de leurs patients. S'appuyant sur les réactions à la réunion des plus fructueuses qui a rassemblé en juin 2005 les parties intéressées, ainsi que sur celles des délégués au Congrès 2005, le Groupe de travail a centré ses efforts sur la rédaction d'un plan d'affaires en vue de l'élaboration d'un Réseau national de bibliothèques pour la santé / National Network of Libraries for Health. Un engagement de financement de la part des participants à la réunion des parties intéressées a signifié qu'une « demande de propositions » pourrait être déposée visant l'engagement des services d'un conseiller chargé de rédiger le plan d'affaires. Pour obtenir une mise à jour sur l'état du plan d'affaires, assurez-vous de visiter le site Internet du RNBS / NNLH.

À la demande des membres de l'ABSC / CHLA, une lettre a été rédigée dans le but de demander le maintien de l'entente du tarif spécial des livres de bibliothèque entre Postes Canada et Patrimoine Canadien. Ce tarif postal d'escompte a été institué en 1939 pour faciliter les prêts entre bibliothèques. Il permet à tous les Canadiens un accès égal à la littérature, sans égard à leur situation géographique.

Pour terminer, je tiens à remercier Rebecca Zakoore qui, avec le présent numéro, termine son terme à titre d'Éditrice. Ce fut l'année des derniers peaufinages de la transition d'un journal imprimé à un journal électronique. Rebecca en a figolé la finition avec art. C'est Sandra Halliday qui tient maintenant les rênes de l'édition et Gillian Griffith assume les responsabilités d'Éditrice adjointe.

**Tamsin Adams-Webber**

Présidente, ABSC / CHLA, 2005–2006



## Evaluating learning in library training workshops: using the retrospective pretest design

Mary McDiarmid and Malcolm Binns

**Abstract:** The aim of this study was to assess the effectiveness of an evaluation instrument using the retrospective pretest design to measure changes in participants' behaviour after library training. This article focuses on the measurement component of training evaluation — the process of answering the question of how much change has occurred. Participants, who were from a large, public academic geriatric care centre in Toronto, included administrators, researchers, clinical and other staff, and university students doing field placements at the hospital. Participants attended one of four 1-hour sessions on the topic of Effectively Searching Google and Google Scholar that were held over a 3-month period. Sixty days post training, a self-administered retrospective pretest questionnaire, consisting of 10 searching behaviour statements developed using the learning objectives for the training session, was used to measure the impact of library training on participants' behaviour. Participants were asked to indicate their level of frequency of performing a searching behaviour described in the statement before and after training using a five-point, Likert-type scale ranging from 1, almost never; 2, seldom; 3, about half the time; 4, often; to 5, almost always. Summary baseline statistics are reported for respondents who never or rarely exhibited the behaviour prior to training. For the change measure, we report the simple percentage of respondents who improved. The findings of this study showed the potential of using the retrospective pretest to help librarians document the outcomes of library training. The benefits of gathering data using the retrospective pretest are discussed.

### Introduction

Hospital librarians spend many hours developing training programs and materials, and delivering training sessions to hospital personnel and physicians. The purpose of this article is to bring the retrospective pretest design, a very valuable and easy-to-use research design, to the attention of librarians evaluating library training programs. For example, this design can be used to evaluate the effectiveness of training in programs such as database training in MEDLINE and other health-related databases or for Internet-searching skills instruction. The effectiveness of training is important and is a subject worthy of research to hospital librarians since it is an indicator evaluated by the Canadian Council on Health Services Accreditation's Information Management Standards. Specifically, it is indicator 6.4: "The education, training, and support are effective" [1]. The big question is how do we know library training is effective, and how do we prove it?

Training is focused on trying to change behaviour or teach new behaviours to individual participants [2]. Kirkpatrick's four-level taxonomy of training outcomes distinguishes between participants' reactions to training (level 1), their acquisition of new knowledge (level 2), changes in on-the-job

behaviour (level 3), and changes in organizational results (level 4) [3]. Training outcomes can be easily measured at Kirkpatrick's level one through little more than a simple satisfaction survey administered at the end of training. The satisfaction with training survey only assesses participants' initial reactions to a course, and participants are asked to rate the level of their satisfaction with the content, handouts and (or) materials, instructor, and overall satisfaction with the training received. For the busy hospital librarian, this is where evaluation of library training usually ends. This does not measure learning [2]. Some librarians ask trainees to complete a pretest and posttest to measure how well the attendees learned the skills and knowledge in the workshop. This assessment corresponds to Kirkpatrick's level 2 assessment. This method has problems since a pretest taken at the beginning of a training program may be invalid because participants have limited knowledge to respond accurately to the items being asked on the pretest. In addition, by the end of a training session, their new understanding of the concepts may have an impact on the responses in their self-assessment [4].

The method in the current study, the retrospective pretest, also known as the post-then-pre evaluation approach, focuses on the process of answering the question of how much change has occurred. Retrospective pretest assessment of training outcomes, corresponding to level three in Kirkpatrick's outcomes of learning, documents changes in trainees' on-the-job behaviour. In the retrospective pretest method, the first question on the posttest asks the participant about behaviour as a result of the training. Then the participant is

**M. McDiarmid.**<sup>1</sup> Staff Library, Baycrest Centre for Geriatric Care, 3560 Bathurst Street, Toronto, ON M6A 2E1, Canada.

**M. Binns.** The Rotman Research Institute, Baycrest Centre for Geriatric Care, 3560 Bathurst Street, Toronto, ON M6A 2E1, Canada.

<sup>1</sup>Corresponding author (e-mail: [mmcdiarmid@baycrest.org](mailto:mmcdiarmid@baycrest.org)).



asked to report what the behaviour had been before the program. This second question is really the pretest question, but it is asked after the training when the participant has sufficient knowledge to answer the question validly. The primary reason for the increased reliability of the answers is that participants often do not know what they do or do not know before training; asking them first about what they do now helps to indicate what it is they actually did not know or do prior to the training [4]. The retrospective pretest has been effective in eliminating response shift bias in educational and training programs [5,6]. Response shift bias is avoided because participants are rating themselves with a single frame of reference on both the posttest and retrospective pretest.

Using the retrospective pretest to collect self-reported behavioural changes in trainees may provide substantial scientific evidence for a library-training program's impact. Researchers have generally concluded that differences between retrospective pretests and conventional posttests are adequate indicators of change in behaviours [7–12]. The retrospective pretest evaluation may offer health sciences librarians a way of documenting the value of library training to their organizations. Measurement is the only way of providing hard evidence to senior management of the value and the bottom line impact of training. A literature search of *Library Literature and Information Science Fulltext* and *LISA: Library and Information Science Abstracts* uncovered no articles describing the use of the retrospective pretest to assess the impact and (or) outcome of library training.

The purpose of this study was to assess the effectiveness of an evaluation instrument using the retrospective pretest to measure changes in participants' behaviour after library training.

## Program description

### Design

The retrospective pretest was chosen because it is a simple, convenient and expeditious method of assessing changes in self-reported knowledge and skills. The retrospective pretest has an added advantage in that it is only administered a single time. It is also flexible because questions can be designed to reflect actual program content as it evolves over the time of a training course [13].

### Settings and participants

The setting for this study was a large, public academic geriatric care centre in Toronto. The participants included administrators, researchers, clinical and other staff, and university students doing field placements at the hospital. Four 1-hour sessions on the topic of Effectively Searching Google and Google Scholar were held over a 3-month period. There were 42 participants in the training program; 15 returned the retrospective pretest questionnaire (a participation rate of 35.7%).

### Intervention

The self-administered retrospective pretest questionnaire (Fig. 1) was used to measure the impact of library training on participants' behaviour. Ten statements were developed using the learning objectives for the training session. Participants were asked to indicate their level of frequency of per-

forming a searching behaviour described in the statement before and after training using a five-point, Likert-type scale ranging from 1, almost never; 2, seldom; 3, about half the time; 4, often; to 5, almost always. The retrospective pretest questionnaire was distributed 60 days post training to all participants via e-mail with a message inviting voluntary participation. Participants were asked to complete the questionnaire and return it anonymously to library services through interoffice mail, or if they preferred, they could complete it online and return it via e-mail. It was felt that 60 days was sufficient time for participants to have incorporated what they had learned into their practice. Participants were told that the data collected would be used to improve the training. Changes in their search behaviour would be reviewed and associated with the content and teaching method. Two weeks after the initial e-mail, a follow-up e-mail was sent to all participants thanking those who had already responded and encouraging the remaining participants, who had not yet responded, to do so within 2 weeks. Participants were not told at the end of the initial training session that they would be receiving a follow-up questionnaire because it could have influenced their post-training behaviour. At the end of each training session, participants received a training satisfaction questionnaire that is routinely given to participants after all library training. They also received a copy of the presentation handout and training slides.

The analysis of data was designed so it could be used by a librarian in a small hospital library setting without access to sophisticated statistical software programs such as SPSS. Data was analyzed using Microsoft Excel. Training effects are described in two waves: baseline and change across training interval. For the baseline data, the percentage of respondents who fell below a score of three (those who never or rarely performed the behaviour) prior to training is reported. For the change measure, the percentage of respondents who improved (i.e., participants who reported increased frequency of a behaviour 60 days post training) is provided.

## Outcomes

The changes in respondents' behaviour pre and post training are shown in Table 1. Before library training, 73% of respondents almost never or seldom used quotes when searching terms as a phrase in Google. After training, 80% of respondents had changed their behaviour and reported using quotes more often. The use of the plus operator before a search term in Google was almost never or seldom performed by 87% of respondents before training. After training, 67% of respondents increased their use of the plus operator. Forty percent of respondents almost never or seldom modified or tried different search strategies in searching Google prior to training. After training, 67% of respondents improved their score on this behaviour, reporting more frequent use of different strategies. A notable majority, 93% of respondents prior to training, almost never or seldom used Google special features such as searching "News" for news stories or "Images" for pictures. After training, 53% increased frequency of usage for these features.

The remaining six learning objectives found less change in respondents' post-training behaviour. Before training, 80% of respondents almost never or seldom used the ad-



**Fig. 1.** Retrospective pretest questionnaire.

For each statement Select the box under the number that best describes your behaviour  
IN BOTH the After and Before columns

1 = almost never, 2 = seldom, 3 = about half the time, 4 = often, 5 = almost always

	After Google Training Do I?					Before Google Training Did I?				
	1	2	3	4	5	1	2	3	4	5
Search terms as a phrase using quotes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use the + operator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Modify my search strategy using different words/phrases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Limit my search to trustworthy sites as needed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use Google flavours to search, e.g. news, images	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Refer to the Advanced Search Page for tips	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use the Google translation feature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Retrieve a lot of irrelevant sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use Google Scholar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use Google Scholar to access the current scholarly medical information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

vanced search page in Google. After training, 47% of the respondents had improved their score. The translation feature in Google was almost never or seldom used by 87% of respondents before training. Post training, only 27% of respondents reported using it more frequently. The retrieval of irrelevant sites had most people scoring quite high (20%) and showed very few respondents (7%) improved after training. Most people prior to training had almost never or seldom used Google Scholar, and after training, 40% of respondents increased their use of Google Scholar. When asked whether respondents used Google Scholar to retrieve current scholarly medical literature, 93% of respondents almost never or seldom did this. After training, 20% of respondents reported increased use of Google Scholar to retrieve scholarly medical literature.

**Discussion**

The retrospective pretest allows researchers to reduce response shift because the participants are able to give pretest answers that are based on a more accurate frame of reference. The participants only understand what you are asking them about after training and so are not able to be accurate if asked pretraining. By using the retrospective pretest, response shift bias can be reduced and therefore increase the likelihood that the observable results are due to the intended pro-

gram effects [15]. Limitations of the retrospective pretest must be acknowledged. The level of recall accuracy available from any self-report must be considered. Despite the fact that response shift bias is reduced by retrospective pretests, self-reports remain a form of estimations [5,6]. The retrospective pretest design may be prone to other possible biases that are common to most other survey designs. There is a possibility of selection bias because of the low response rate. The small sample of participants that responded to the post-training evaluation may represent only those participants who were highly motivated to learn about the topic and were therefore more likely to utilize the strategies they learned in the training session. Because of the possibility of selection bias and the small sample size in this study, these data are considered preliminary and perhaps not generalizable to a broader population.

As a result of using the retrospective pretest, the librarian-instructor gained the following insights. With a modest investment of time, this self-administered evaluation tool provided rich data (see Table 2). Data gathered were relatively easy to analyze and communicate as change in behaviours. Among the advantages of using the retrospective pretest to evaluate participants' learning is that it aided in clarifying where the training was successful, where content was redundant, or where the content needed to be revised. For example, the training was successful in promoting the use of

**Table 1.** Percentage of respondents who scored less than 3 on the pretest and the percentage of respondents who performed the behaviour with increased frequency after training ( $n = 15$ ).

Learning objective	Pretest % of respondents who performed behaviour almost never or seldom	Posttest % of respondents who performed behaviour with increased frequency
Search terms as a phrase using quotes	73	80
Use the "+" operator	87	67
Modify the search strategy using different words or phrases	40	67
Limit the search to trustworthy sites as needed	27	33
Use Google flavours to search, e.g., news, images	93	53
Refer to the Advanced Search Page for tips	80	47
Use the Google translation feature	87	27
Retrieve a lot of irrelevant sites	20	7
Use Google Scholar	93	40
Use Google Scholar to access the current scholarly medical information	93	20

**Table 2.** Frequency of response ( $n = 15$ ).

Learning objective	Test	Almost never	Seldom	About half the time	Often	Almost always
Search terms as phrase using quotes	Pretest	8 (53.3)	3 (20.0)	2 (13.3)	–	2 (13.3)
	Posttest	1 (6.7)	1 (6.7)	3 (20.0)	5 (33.3)	5 (33.3)
Use the + operator	Pretest	12 (80.0)	1 (6.7)	–	–	2 (13.3)
	Posttest	3 (20.0)	2 (13.3)	3 (20.0)	4 (26.7)	3 (20.0)
Modify search strategy	Pretest	1 (6.7)	5 (33.3)	4 (26.7)	3 (20.0)	2 (13.3)
	Posttest	–	–	5 (33.3)	5 (33.3)	5 (33.3)
Limit search to trustworthy sites	Pretest	2 (13.3)	2 (13.3)	3 (20.0)	5 (33.3)	3 (20.0)
	Posttest	1 (6.7)	3 (20.0)	1 (6.7)	5 (33.3)	5 (33.3)
Use Google flavours such as news, images	Pretest	9 (60.0)	5 (33.3)	1 (6.7)	–	–
	Posttest	6 (40.0)	3 (20.0)	5 (33.3)	1 (6.7)	–
Refer to advanced search page	Pretest	12 (80.0)	–	2 (13.3)	1 (6.7)	–
	Posttest	7 (46.7)	3 (20.0)	–	3 (20.0)	2 (13.3)
Use Google translation	Pretest	12 (80.0)	1 (6.7)	2 (13.3)	–	–
	Posttest	8 (53.3)	3 (20.0)	3 (20.0)	1 (6.7)	–
Retrieve a lot of irrelevant sites	Pretest	2 (13.3)	1 (6.7)	4 (26.7)	4 (26.7)	4 (26.7)
	Posttest	2 (13.3)	6 (40.0)	6 (40.0)	–	1 (6.7)
Use Google Scholar	Pretest	13 (86.7)	1 (6.7)	1 (6.7)	–	–
	Posttest	8 (53.3)	3 (20.0)	1 (6.7)	2 (13.3)	1 (6.7)
Use Google Scholar to access current medical information	Pretest	13 (86.7)	1 (6.7)	1 (6.7)	–	–
	Posttest	10 (66.7)	2 (13.3)	1 (6.7)	1 (6.7)	1 (6.7)

**Note:** The values in parentheses represent the percentage of responses for each search behaviour.

quotes, the use of the plus operator, and modifying a searching strategy using different words or phrases. Only two of 15 respondents did not improve their score after training in using quotes, and only four of 15 respondents failed to change their behaviour regarding the plus operator and modifying a search strategy after training. Another example that demonstrates where training was successful was the number of respondents after training who used Google Scholar to retrieve scholarly medical information. At first glance the low rate of 20% of respondents who improved their score post training by using Google Scholar to find scholarly medical literature might seem disappointing, unless one knows that

during the training session, the limitations of Google Scholar were emphasized. Google Scholar was not promoted as a source for scholarly medical information during training because it was still just a beta test site. The low number of respondents who improved their score after training was evidence of success because it demonstrated that trainees had absorbed the knowledge that Google Scholar was not the place to look for scholarly medical information. The fact that 20% increased their use of Google Scholar after training informed the librarian-instructor that perhaps training sparked an interest in Google Scholar. The slight increase does not necessarily mean that training was unsuccessful in

conveying the unreliability of Google Scholar. Another way to interpret this increase is that people may do a quick and convenient search in Google Scholar and then check what they find in a more reliable source such as MEDLINE.

The librarian-instructor realized from the findings that perhaps there is little demand for the Google translation feature since 10 of 15 respondents did not change their behaviour after training. Of these 10 respondents, eight appeared to have little use for the translation feature because they almost never used it either before or after training. Another area of concern regarding content was in the section dealing with strategies for reducing the amount of irrelevant sites retrieved. The current study showed that after training, respondents still reported a high frequency of retrieving irrelevant sites. This finding prompted the librarian-instructor to change the content of the training session to increase the time spent in the session on strategies that could be used to reduce the number of irrelevant sites.

The data gathered through a self-administered retrospective pretest instrument is beneficial to librarian trainers in five specific ways. First, it is effective as a way to quantify or measure changes in participants' behaviour after library training. Second, it helps to identify training content that needs to be reduced or enhanced. Third, it can be used to demonstrate the impact of library training on workers' behaviour in the workplace. Fourth, it can also be used as a quality improvement initiative by setting a quality improvement goal for each learning behaviour (e.g., at least 50% of all trainees will report that after training they retrieve fewer irrelevant sites). Fifth, another unexpected benefit of the retrospective pretest questionnaire was that it helped to promote the library as a client-focused service. During the writing of this paper, our hospital underwent an accreditation process, and one of the questions posed to the information management team was to give an example of how we changed a procedure or process based on feedback from clients. We described the retrospective pretest evaluation used by library services in assessing training outcomes, and the accreditation surveyors cited this as an excellent example.

Using retrospective pretest evaluation aids in the librarian's never-ending effort to document for senior management how library training is of value, is effective, and impacts on trainees' behaviour. It is easy for trainees to complete, data can be quickly analyzed using simple spreadsheet software, and, if appropriate software is available, comparison of means using statistics such as the *t*-test can be used to identify significant changes in specific behaviours. The challenge in constructing a retrospective pretest evaluation instrument is to identify specific behaviours or learning objectives from your training content that may affect change in trainees. Then you need to specify an appropriate measurement scale such as

the Likert five-point scale used in the current study, which tests the amount of self-perceived behaviour change.

A future step that may be undertaken as an addendum to the current study is to attempt to satisfy Kirkpatrick's level 4 evaluation that documents changes in organizational results. One could revisit the trainees 1 year after training to ask them to specify any benefits they attribute directly to the training they received, such as saved time, increased efficiency, improved decision-making, or increased retrieval of higher quality Internet-based literature.

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## Investigating information-seeking behaviors of primary care physicians who care for older depressed patients and their family caregivers: a pilot study

Mary Jo Dorsey and Ellen Detlefsen

**Abstract:** Objective – To describe preliminary findings from a study of information-seeking behaviors of primary care physicians who care for elderly and depressed patients, and the correlation between what is sought versus what is provided to the patient and (or) caregiver. Setting – Physicians in two large ambulatory primary care practices throughout urban Pittsburgh, Pennsylvania, who take care of geriatric patients. Methods – Structured interviews, with common questions, will be conducted with 12 primary care physicians to determine patterns of information-seeking behaviors. Environmental scans of physicians' offices for evidence of their existing information behaviors will complement the information obtained from the interviews. Results – This pilot study provides an analysis of the resources primary care physicians use to seek information to provide to patients and caregivers. Analyses show types of information sought, time spent seeking information, and methods used to find information given to patients. Conclusions – With mounting evidence of the Internet being used for patient self care, it is essential to understand if primary care physicians understand the scope and breadth of information readily available to their patients. The primary care physician needs to be aware of the types of information made available to their patients and the caregivers who are inclined to obtain information for the patient.

### Introduction

Over the past decade, studies on the information-seeking behavior of physicians have highlighted the paths physicians use to obtain clinical literature for the purposes of practicing evidence-based medicine. This study examines the methods physicians use to obtain consumer information for patients and their caregivers. Specifically shown are findings from a pilot study of the information-seeking behaviors of primary care physicians who care for elderly and depressed patients and the correlation between what is sought versus what is provided to the patient and (or) caregiver.

For the purpose of this study, the term "information-seeking behavior" refers to a physician's methods of and attitudes toward the process of locating relevant information for clinical or patient education uses. Physicians' behaviors include the following: (1) the use of printed information from textbooks, journals, pamphlets, and pharmacological product inserts in hard copy; (2) the use of electronic or digital media, includ-

ing online or electronic textbooks, databases, journals and Web sites, and audiovisual materials, either personally owned or library owned; and (3) conversing with colleagues or others knowledgeable in a field of expertise via the telephone, in person, or through some electronic mechanism. Vehicles used to gather information include paper, computers, electronic media, and personal correspondence via telephone, fax, computer (e-mail, chat), or face-to-face conversations. In 2000, McKnight and Peet's study of health care providers' information seeking [1] found that in spite of the onset of the availability of online resources, clinicians were still using older, more traditional ways of gathering information.

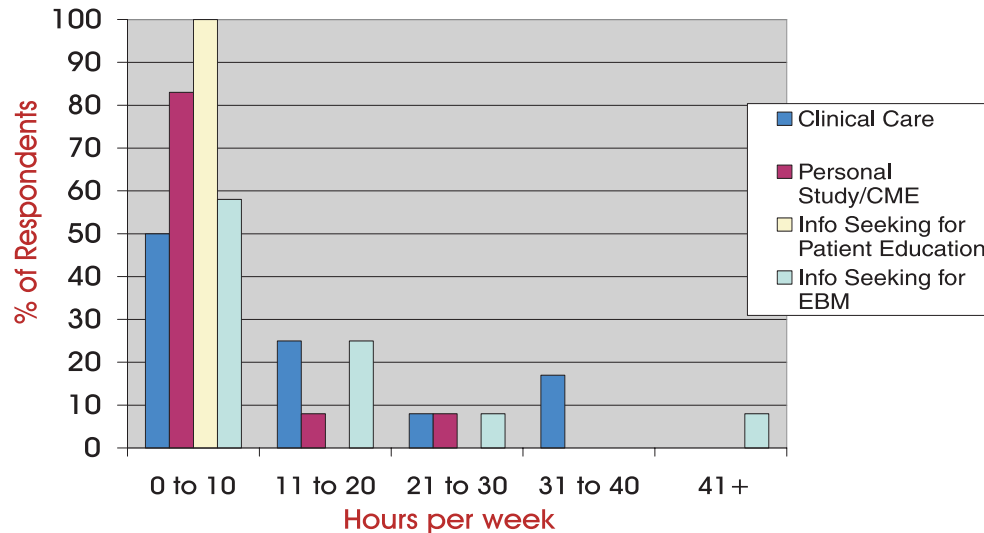
Although looking for information in an electronic atmosphere is becoming ubiquitous, textbooks and personal contacts remain significant. Bennett et al. [2] indicated that approximately half of the physicians polled in a 2001 survey noted that the Internet made a significant impact on the way they conducted their practices. Conversely, in 2004, Bryant [3] cited that four-fifths of the interviewees declared that refer-

**M.J. Dorsey.**<sup>1</sup> Richard M. Johnston Health Sciences Library, The Western Pennsylvania Hospital, 4800 Friendship Avenue, Pittsburgh, PA 15224, USA, and the Department of Library & Information Science, School of Information Sciences, University of Pittsburgh, 135 N. Bellefield Avenue, Pittsburgh, PA 15260, USA.

**E. Detlefsen.** Department of Library & Information Science, School of Information Sciences; Center for Biomedical Informatics, School of Medicine and the NIMH Advanced Center in Interventions and Services Research for Late Life Mood Disorders, School of Medicine, University of Pittsburgh, 135 N. Bellefield Avenue, Pittsburgh PA 15260, USA.

<sup>1</sup>Corresponding author (e-mail: mjd21@pitt.edu).

**Fig. 1.** Time spent information seeking. CME, continuing medical education; EBM, evidence-based medicine.



ence to printed information within the practice (to verify reference data and to aid diagnosis) was the most common information-seeking behavior. Ranking second was the use of electronic information sources. Physicians in this survey did not feel comfortable with the levels of their searching skills and implied that doing their searches in conjunction with an information professional would yield the best results.

Casebeer et al. [4] point out in a 2002 study that 80% of the respondents used the Internet on a consistent basis to retrieve information. Access to self-growth factors such as continuing medical education (CME), rapid self-performed literature searches, and access to solutions to patients' problems combined with immediacy, accuracy, and ease of use contributes not only to further knowledge, but to improved patient care as well. D'Alessandro et al.'s 2004 study [5] reports a dwindling of paper resource usage with a noteworthy rise in electronic resource use. Nylenna and Aasland [6] studied the effects of keeping up with medical literature in the information explosion era. Although the study reflected the trends of Norwegian doctors specifically, it notes a unique thought: with the flood of information needed to stay current in today's medical world, the onset of the Internet may be presenting more of a gap between doctors who seek new professional knowledge and those who do not. Those who have access and are on board with electronic information seeking are fully on board. Those who have not met that reality yet are falling behind on the learning curve. This gives information professionals a distinct purpose in the future of consumer health information proliferation. How can these analyses be used to prepare physicians for the advancement of evidence-based consumer health information?

## Setting and methods

Physicians in two large primary care practices in urban Pittsburgh, Pennsylvania, who care for geriatric patients, were asked to complete a survey using SurveyMonkey® software [7]. The survey, containing 10 common questions, was administered to 12 primary care physicians to determine pat-

terns of their information-seeking behaviors. Screen shots of the survey appear in Appendix A.

## Results

### Demographics

One hundred percent of the respondents were licensed medical doctors with the M.D. degree. The majority (91%) were board certified in internal medicine, while the remaining participants had certifications in geriatrics, family practice, and one certification from the Royal College of Physicians. Slightly more than one-half of the participants have been in practice for more than 10 years, while less than one-half have been in practice for 0–10 years.

### Question 1 – practice of depressed elderly

Physicians reported that from 5% to 30% of their work week consisted of treating elderly patients.

### Question 2 – time spent information seeking

Figure 1 shows the time spent information seeking in hours per week. The types of information sought were divided into four categories, and the time spent searching each was evaluated by the participants. The categories were the following: information for clinical care; personal study or CME; information for patient education; and information for evidence-based practice methods. Overall, 0–10 h per week was the average answer calculated for all categories of time spent seeking information.

### Question 3 – electronic devices used in office of practice

Confirming the ease of access to electronic resources, 100% reported using a computer; 92% had Internet access in their clinical office setting; and 50% used a PDA in the clinical setting.

### Question 4 – most common methods used to find information to give to patients

Participants were asked to list the percentage of time used on each of the 14 methods of gathering information. Of the



Fig. 2. Most common methods used to find information for patients.

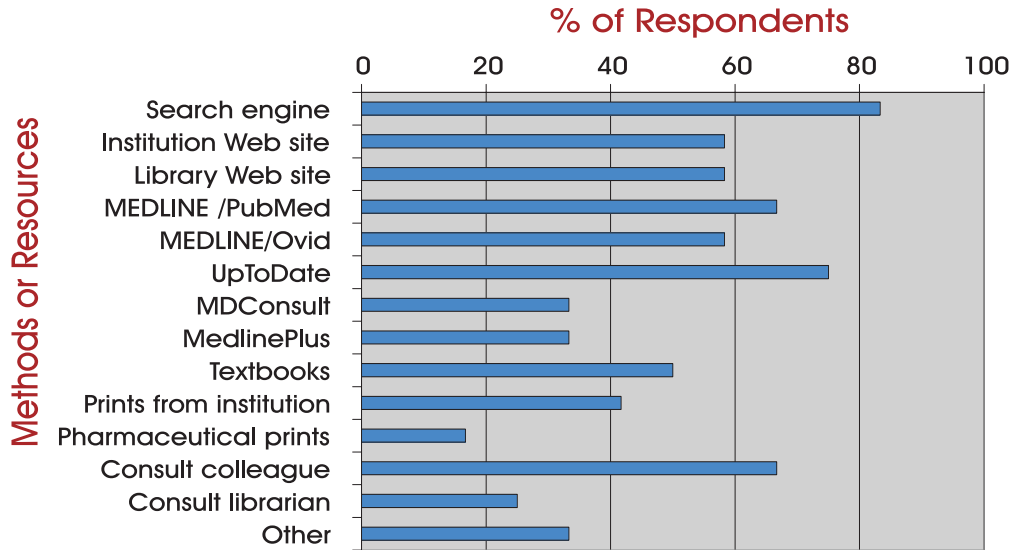
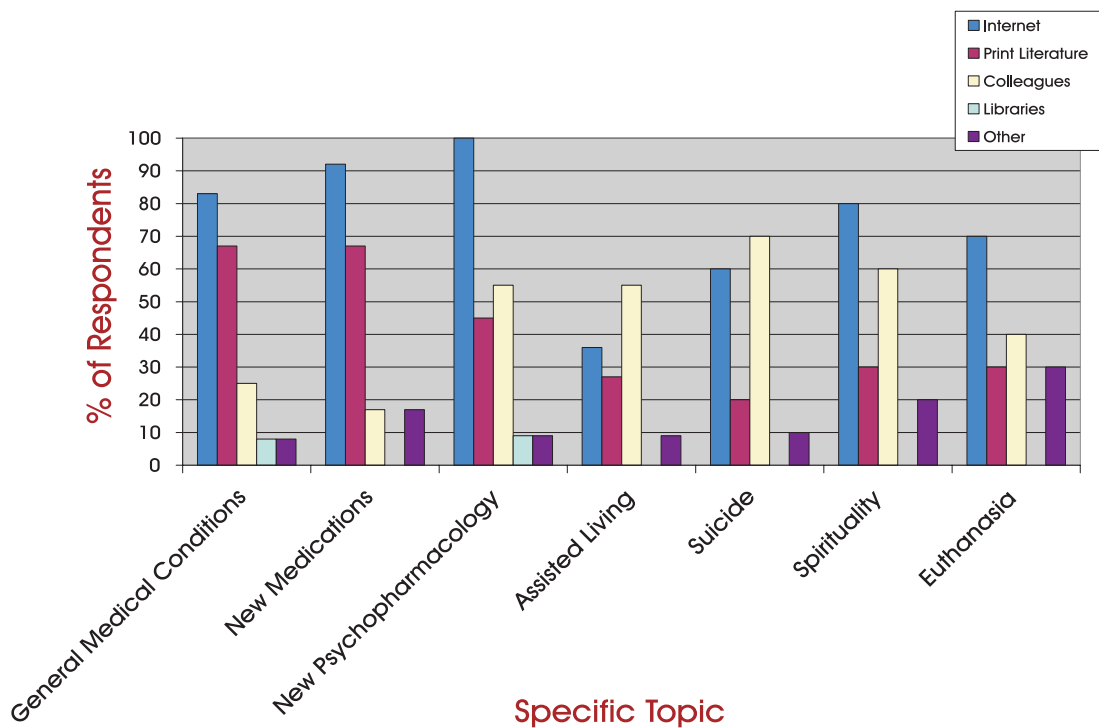


Fig. 3. Information on specific topics.



14 options listed, each was selected at least once. However, the top three methods of information seeking used to give information to patients were the following: (1) use of an Internet search engine; (2) use of a specific software product, such as UpToDate (UpToDate, Waltham, Mass.); and (3) use of a colleague’s advice obtained via electronic mail, telephone, or in person. Figure 2 shows the range of results.

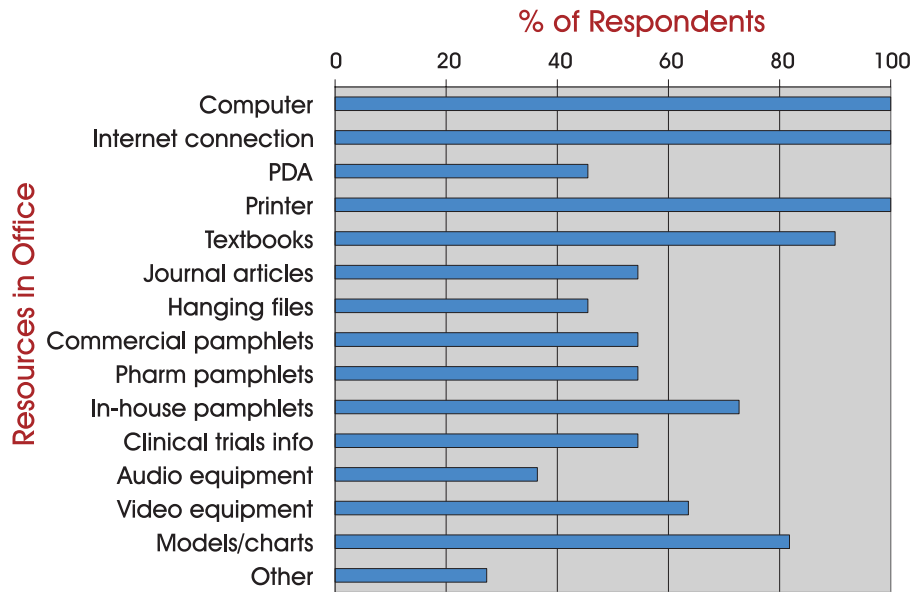
**Questions 5 and 6 – questions on specific topics**

The physicians were then asked where they tend to go for information in relation to specific topics. Participants were asked to consider whether they went to the Internet, printed literature, colleagues, a library, or to another place when

they were seeking information in the following categories: general medical conditions, new medications, new psychopharmacology, assisted living, suicide, spirituality, and euthanasia. While the Internet (and to a lesser degree, print materials) remained a strong source of reference for medical conditions and pharmacology, consultation with colleagues along with the use of the Internet were the clear choices when it came to obtaining information on more elderly specific topics such as assisted living, suicide, spirituality, and euthanasia resources (Fig. 3). The category “other” included use of UpToDate, area adult services, area agencies on aging, chaplains, religious texts, and the software product Epocrates® (Epocrates, Inc., San Mateo, Calif.). Interestingly, a library



Fig. 4. Resources located within physician's clinical office setting.



was consulted less than 10% of the time consistently across the spectrum of these specific topics.

#### Question 7 – office scan

In lieu of actually visiting the physician's office to perform a visual scan, this question asked the participant to report on the information resources and tools in their personal, clinical office setting. Of the 14 objects listed for identification, all respondents reported having a computer with a connection to the Internet along with a printer. Textbooks, models, and charts rounded out the remaining popular information venues within the office. Institutional (in-house) pamphlets and video equipment were somewhat popular and located within the office settings. Commercially produced pamphlets by pharmaceutical or medical device companies, PDAs, hanging files (of copied articles), clinical trial information, and audio information were among the less frequently consulted information resources for patient education. Full results are shown in Fig. 4.

#### Discussion

With mounting evidence of the Internet being used for patient self-care, it is essential to understand if primary care physicians understand the scope and breadth of information readily available to their patients. In the instance of the elderly, particularly the depressed elderly, the primary care physician needs to be aware of the types of information made available to their patients, including the caregivers who are inclined to obtain information for the patient.

In this small sampling of physicians, the most common methods of gathering information for patient education appear to be the following: (i) using an Internet search engine, (ii) using professional resources such as UpToDate, and (iii) consulting a colleague. The least common methods of gathering information for patient education appear to be the following: (i) using preprinted materials from pharmaceutical or medical device companies, (ii) consulting a librarian,

and (iii) searching specific authoritative resources such as MDConsult or MedlinePlus.

Please note that this study is the preliminary work for a larger, multimodal study to be undertaken in 2005, looking at primary care physicians who are participating in a research network affiliated with a newly funded center for interventions and services research on late-life mood disorders. This was a test of a novel methodology and data collection method. One reason for the study was to see if these physicians would be willing to answer a Web-delivered questionnaire instead of a paper and pencil or telephone survey. Another reason for the study was to see if the categories of resources and tools were likely candidates for a larger survey to be conducted with added environmental scans.

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## Appendix A

Fig. A1 (a). Screen shot of survey.

**Information Seeking Behaviors of Primary Care Physicians who take care of older depressed patients** [Exit this survey >>](#)

2. Page One

Please answer the following as they pertain to your clinical practice setting.

**1. What percentage of your practice involves providing care to elderly patients who may be depressed?**

**2. How many hours per week of your time is spent doing the following?**

Providing clinical care?	select one answer	
Pursuing personal study/CME?		
Information seeking for patient education?		
Information seeking for clinical decision-making (evidence-based medicine)?		

**3. Place a check in the box next to items that you yourself use in your office.**

- Computer
- Internet access
- PDA

**4. Place a check in the box next to each of the methods you use to find information that you give to your patients. You may check more than one.**

- Search Internet using a search engine such as Google
- Search Internet using your institution's website and resources
- Search a Library website
- Search professional resources such as MEDLINE/PubMed
- Search professional resources such as MEDLINE/Ovid
- Search professional resources such as UpToDate
- Search professional resources such as MDConsult
- Search consumer health websites such as MedlinePlus
- Scan textbooks or printed materials from a personal collection
- Offer pre-printed materials from your institution
- Offer pre-printed materials from a pharmaceutical or medical device agency
- Consult a colleague
- Consult a Librarian
- Other (please specify)

**5. When you need information on these specific topics for a patient or family member, where do you typically go?**

	Internet	Printed literature	Colleague	Librarian	Other (please list in Question 6)
Info on general medical conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Info on new medications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Info on new psychopharmacology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Info on assisted living	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Info on suicide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Info on spirituality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Info on euthanasia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**6. If you entered "Other" to any of the selections in Question 5, please list where you go for information.**

Fig. A1 (b).

**Information Seeking Behaviors of Primary Care Physicians who take care of older depressed patients** [Exit this survey >>](#)  
**2. Page One**

Please answer the following as they pertain to your clinical practice setting.

1. What percentage of your practice involves providing care to elderly patients who may be depressed?

2. How many hours per week of your time is spent doing the following?

select  
one  
answer

Providing clinical care?

Pursuing personal study/CME?

Information seeking for patient education?

Information seeking for clinical decision-making (evidence-based medicine)?

3. Place a check in the box next to items that you yourself use in your office.

- Computer
- Internet access
- PDA

4. Place a check in the box next to each of the methods you use to find information that you give to your patients. You may check more than one.

- Search Internet using a search engine such as Google
- Search Internet using your institution's website and resources
- Search a Library website
- Search professional resources such as MEDLINE/PubMed
- Search professional resources such as MEDLINE/Ovid
- Search professional resources such as UpToDate
- Search professional resources such as MDConsult
- Search consumer health websites such as MedlinePlus
- Scan textbooks or printed materials from a personal collection
- Offer pre-printed materials from your institution
- Offer pre-printed materials from a pharmaceutical or medical device agency
- Consult a colleague
- Consult a Librarian
- Other (please specify)

5. When you need information on these specific topics for a patient or family member, where do you typically go?

	Internet	Printed literature	Colleague	Librarian	Other (please list in Question 6)
Info on general medical conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Info on new medications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Info on new psychopharmacology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Info on assisted living	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Info on suicide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Info on spirituality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Info on euthanasia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. If you entered "Other" to any of the selections in Question 5, please list where you go for information.

## Consumer health information

Compiled by Susan Murray

### Consumers and the Internet

<http://www.aishealth.com/EHealthBusiness/060905.html>

In a survey sponsored by the Medical Broadcast Company (US), more than 40% of the 991 consumers surveyed chose the Internet as their most trusted media source for health information, compared with 16% who believed the information from other media outlets. Although physicians remain the most trusted source of health information overall, more than 65% of consumers are going online to supplement their visit, either before or after the appointment. When looking for health information on the Web, more than 85% of respondents indicated they consult two or more sites.

[http://www.pewinternet.org/pdfs/PIP\\_Healthtopics\\_May05.pdf](http://www.pewinternet.org/pdfs/PIP_Healthtopics_May05.pdf)

According to the Pew Internet and American Life Report "Health Information Online", released in May 2005, "eight in ten Internet users have looked online for information on at least one of 16 health topics, with increased interest since 2002 in diet, fitness, drugs, health insurance, experimental treatments, and particular doctors and hospitals."

### Public Health Information Tutorial and Manual

<http://phpartners.org/tutorial/>

The online Public Health Information and Data Tutorial is a new online tool designed to help the public health workforce effectively locate and use health information. The tutorial was prepared by the National Library of Medicine (NLM), in collaboration with the University of Michigan Public Health Library & Informatics Division, and Partners in Information Access for the Public Health Workforce. The training manual can be downloaded, and there are no copyright restrictions.

### New consumer health information (CHI) publications

Lewis D, Eysenbach G, Kukafka R, Stavri PZ, Jimison H, editors. *Consumer health informatics: informing consumers and improving health care*. Secaucus, N.J.: Springer; 2005.

The 20 chapters in this volume explore the dialogue between patients and computers in seeking health information. Authors include Dr. Gunther Eysenbach, Senior Scientist at

the Centre for Global eHealth Innovation, based at the University Health Network (design and evaluation of consumer health information Web sites, computers as support groups, and virtual communities MedCERTAIN/MedCIRCLE), Eve-Marie Lacroix from the NLM, and Catherine Arnott Smith (the 10 000 consumer health questions project funded by NLM).

### US Government sites – CHI search

<http://www.healthfinder.gov/search/about.asp>

The US government Web site healthfinder has released a Google-powered search tool that limits searches to consumer health information from 300 US government agencies.

### Consumer health sites and databases – review

Golderman G, Connolly B. Staying healthy. *netconnect* (supplement to *Library Journal*). 2005 Summer:18–26. Available from <http://www.libraryjournal.com/article/CA609686.html>.

This article rates the major CHI sites with headings entitled content, searchability, price, and who needs it? Furthermore, it includes Alt HealthWatch (EBSCO), Health and Wellness Resource Center and Alternative Health Module (Gale), Health Source – Consumer Edition (EBSCO), Natural & Alternative Treatments (EBSCO), and ProQuest Health and Medical Complete (ProQuest Information & Learning). The article also provides brief reviews of the following six health Web sites: Health AtoZ, Mayo Clinic, MedlinePlus, MerckSource, National Library of Medicine, and WebMd Health.

### *The New York Times* "Being a Patient" series

Jan Hoffman authored the following two thought-provoking stories in the 14 August 2005 issue of *The New York Times*:

"Awash in information, patients face a lonely, uncertain road", pp. 1, 16–17.

"Patients turn to advocates, support groups and e-mail, too", p. 17.

With a plethora of health information offering overwhelming treatment options, this series raises the question of who will guide today's patient.

***Natural Cures “They” Don’t Want You to Know About***  
**and other controversial health books**

In October 2005, a discussion began on the CAPHIS listserv about Kevin Trudeau’s book *Natural Cures “They” Don’t Want You to Know About*. On one side of the ring are librarians who believe that it is the duty of public librarians not to be the arbiter of what is authoritative health information and make this book available to users. On the other side are librarians who feel that collection development policy should determine what materials are purchased, i.e., the credentials and reputation of the author, if the ideas being put forth have any merit and (or) evidence, etc. In case you haven’t heard about Kevin Trudeau, he’s a prolific marketer — selling everything from health products (e.g., a coral calcium product

purported to cure cancer) to a mega memory system that would help anyone achieve a photographic memory (even people with learning disabilities and low IQs) — who was banned by the US Federal Trade Commission in 2004 and fined US\$2 million for making misleading disease or health benefits claims on his many infomercials (see <http://www.ftc.gov/opa/2004/09/trudeaucoral.htm>).

At CHIS, we decided not to purchase this book, nor have we purchased the many “natural cures for...” (diabetes, high blood pressure, headaches, killer germs, and my favourite — health disasters) books authored by Dr. Cass Ingram, an osteopath by training. How does your library handle consumer demand for these sorts of books?

## Current research

Compiled by Gillian Griffith

Bar-Ilan J, Fink N. Preference for electronic format of scientific journals — a case study of the science library users at the Hebrew University. *Library & Information Science Research*. 2005;27(3):363–76.

The article reports the results of a survey on the use of printed and electronic journals in a science library. In May 2003, when the survey was conducted, users had already been exposed to electronic journals for a number of years; most of the scientific journals were accessible in electronic format while the print format was still available. The major findings are that more than 80% of the respondents frequently use and prefer an electronic format, irrespective of their rank or age. Most previous studies found an inverse relationship between e-journal usage and age, but these results indicate that by now users of all ages switched to the electronic format not only in terms of usage but of preference as well.

Mattana J, Charitou M, Mills L, Baskin C, Steinberg H, Tu C, Kerpen H. Personal digital assistants: a review of their application in graduate medical education. *Am J Med Qual*. 2005 Sep–Oct;20(5):262–7.

Personal digital assistants (PDAs) have become widely used in medicine and may be especially useful in achieving the goals of graduate medical education. The complex challenges that residents and their program directors in graduate medical education programs confront may be met more readily with the use of these devices. The PDA's ability to serve as an informational database, an organizer of patient-specific information, a tracking tool that can be used by program directors to enhance curriculum design, and a tool for conducting education research are some of the ways that these devices might favorably affect residency training in graduate medical education programs.

Dexter N, Shearer B, Nagy S. Partnering with PDAs: The Florida State University College of Medicine Medical Library experience. *J Electronic Resour Med Libr*. 2006;3(1):9–16. In press.

Medical librarians are aware of the opportunities that PDAs provide in delivering library content to clinicians and other users. However, the time and expense required to learn to use this technology are significant. This article describes a project designed by Charlotte Edwards Maguire Medical Library at Florida State University College of Medicine to deliver PDAs, software, and training to hospital librarians. The deployment of the PDAs is described along with recommendations for similar projects.

O'Shea DI. PubMed on Tap: medical research at your fingertips. *J Electronic Resour Med Libr*. 2005;2(4):121–30.

The National Library of Medicine has developed several information resources specifically designed for use on PDAs. This article looks at one of those applications, PubMed on Tap, and discusses some of the benefits and limitations of using it in hospital and academic settings.

Watson EM. Subject knowledge in the health sciences library: an online survey of Canadian academic health sciences librarians. *J Med Libr Assoc*. 2005 Oct;93(4):459–66.

**Objectives:** This study investigated whether Canadian academic health sciences librarians found knowledge of the health sciences to be important and, if so, how they acquired and maintained this knowledge. **Methods:** Data were gathered using a Web-based questionnaire made available to Canadian academic health sciences librarians. **Results:** Respondents recognized the need for subject knowledge; 93.3% of respondents indicated that subject knowledge was “very important” or “somewhat important” to doing their job. However, few respondents felt that holding a degree in the health sciences was necessary. Respondents reported devoting on average more than 6 hours per week to continuing education through various means. Reading or browsing health sciences journals, visiting Web sites, studying independently, and participating in professional associations were identified by the largest number of participants as the best ways to become and stay informed. **Conclusions:** Although more research needs to be done with a larger sample, subject knowledge continues to be important to Canadian academic health sciences librarians. Continuing education, rather than formal degree studies, is the method of choice for obtaining and maintaining this knowledge.

Williams TL, Lindsay JM, Burnham JF. Online vs. print journals: new challenges for academic medical libraries. *J Electronic Resour Med Libr*. 2006;3(1):1–8. In press.

In recent years many published articles have compared costs, benefits, and various pros and cons of acquiring print versus online full-text journals. However, for medical and scientific titles where currency is of the essence, do medical libraries still have a choice of whether to get one or the other? This paper will discuss costs, archiving, and future concerns faced by the University of South Alabama Biomedical Library. The authors conclude that acquiring electronic journals has become more critical than print only when both are not affordable.

Forrest DV. The librarians. *Am J Psychiatry*. 2005 Oct;162(10):1820–3.

The library, with its tangible books and journals, allows for a heuristic, exploratory sojourn and a collegiality be-

tween librarians and users that electronic information loses. Here, Forrest discusses the crisis that libraries are facing because of electronic journals.



## BOOK REVIEW / CRITIQUE DE LIVRE

**Last one out turn off the lights: is this the future of American and Canadian libraries?** Edited by Susan E. Cleyle and Louise M. McGillis. Toronto: Scarecrow Press, 2005. 227 pages. ISBN 0-8108-5192-X.

Libraries should be like Chapters? Don't be so 1999. These days, libraries have to be like the whole mall. So say contributors to this vigorous collection of new essays edited by Susan E. Cleyle and Louise M. McGillis. Nineteen pieces by 23 Canadian and American authors make for a variety of voices and perspectives. Some names and viewpoints are familiar, including Roch Carrier, Roy Tennant, Irene E. McDermott, and John Tesky, but *Last one out turn off the lights: is this the future of American and Canadian libraries?* includes new voices and many new ideas. Unfortunately for readers of the *Journal of the Canadian Health Libraries Association*, the volume is not so wide-ranging as to have any sustained discussion of special or health information librarianship.

The title of the book is more alarmist than the content. Few of the authors view the shift from print to digital and from acquisition to access as either comprehensive or likely to render librarians redundant. The best essays are brimming with optimism, as they scout new directions for the profession. Amanda Etches-Johnson waxes enthusiastic for blogs broadcast through Really Simple Syndication (RSS) feeds, while Irene McDermott's passion is for cell phone-based reference, though she admits that it is not yet practical for clients with complex queries.

More than half of the collection deals with fallout from the digital revolution. Melody Burton considers how consortia-based access to digital resources is producing mono collections throughout North America (among other issues), while John Tesky calls on librarians to get on with new configurations of library services, including one-on-one and group sessions on information literacy. Ruth E. Kifer describes how one American library reacted to dropping gate-counts by breaking the library system in two, offering both a relatively traditional, research-oriented "quiet" library and an open-concept, mall-like information centre with computers, media collections, comfy chairs, lots of meeting spaces, and a food court down the hall.

*Last one out* suffers somewhat from the lag that accompanies print publication. The blogging phenomenon has taken off so successfully that it is odd to read about "the recent buzz surrounding weblogs (or blogs)" (p. 31). Recent? And it is positively bizarre to have a pair of authors make like anthropologists as they describe the strange behaviours of online communities. Apparently, these consist of people "with common professional practice interests who 'meet' virtually". In days to come, these communities "will be very fluid, coming and going to meet current needs" (pp. 179–80).

The weakest sections are those that address post-MLIS (master of library and information science) certification and

the future of library associations. Though the essays on the digital revolution are vibrant, combining proactive advice and perceptive analysis, these sections are enervated amidst the thin air of rarefied theorizing. The exceptions prove the rule. Alison Nussbaumer's stirring call for librarians personally to take charge of their development and the rejuvenation of their profession, rather than wait for the pie-in-the-sky solution of certification, is grounded in a career of doing just that. Similarly, Barry M. Bishop's engrossing description of how the "can-do" philosophy of the Texas Library Association has created a growing and engaged membership contrasts with the pointless generational stereotyping that plagues the other essays on associations. People are people; we would do well to look at how best to champion the needs of our peers and clients rather than take shelter amidst inconsistent assertions of why one generation is more likely than another to participate in associations.

It is not too partisan to suggest that, by failing to address special or health information librarianship, the editors have missed exciting recent developments in our profession. For example, the emergence of evidence-based medicine has left health information librarians grappling daily with how to execute sufficiently comprehensive searches across open-access and fee-based databases, using disparate controlled vocabularies, and throughout the unindexed Internet. Similarly, the ballyhoo about librarians teaching information literacy is mere noise to special librarians charged not with educating their clients but with presenting datasets precisely tailored to the exact needs of a project.

But it is petty to criticize a book so sweeping and thought-provoking for what it does not do. *Last one out* offers intelligent engagement with urgent issues, presenting multiple perspectives, persuasive analysis, and potential solutions. Reading this book as a barometer of the profession, we have moved beyond the fear that digital resources will render obsolete either physical libraries or human librarians. It is now apparent that our new opportunities far outweigh what we have lost. And at least we no longer will be told to "be like Chapters". It is not a bad thing to have libraries emulate malls rather than suburban bookstores. The mall represents consumer choice and, in its open spaces, echoes this collection's great refrain — offer choice or go bankrupt. Libraries must meet the ever increasing demands of varied searching, reading, and learning behaviours, behaviours determined by available technologies, academic disciplines, and modern culture. We do not have the luxury of declaring that our mission is impossible; libraries will thrive by being all things to all people, and die when they fail.

### Greg Bak

Canadian Coordinating Office for Health Technology

Assessment (CCOHTA)

865 Carling Avenue, Suite 600

Ottawa, ON K1S 5S8, Canada

E-mail: [gregb@ccohta.ca](mailto:gregb@ccohta.ca)



NEWS AND NOTES / NOUVELLES ET NOTES

Compiled by Gillian Griffith

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## NEWS AND NOTES / NOUVELLES ET NOTES

### In memoriam

#### Colin William Fraser, 1925–2005

Bill Fraser (Bachelor of Library Science, McGill, 1949) was Director of the British Columbia Medical Library Service (BCMLS) of the College of Physicians and Surgeons of British Columbia from 1961 to 1991. Bill was elected to life membership in the Health Libraries Association of British Columbia, the British Columbia Library Association, and the Canadian Health Libraries Association / Association des bibliothèques de la santé du Canada (CHLA / ABSC). The Medical Library Association (MLA) elected him a Fellow in 1991. He was a significant influence in medical and hospital librarianship in the Pacific Northwest and in the Canadian medical and library communities. That Bill was not an academic librarian and was such a progressive force in health librarianship is an indication of his character and intellect.

Bill passed away peacefully on 12 October 2005. The sad news brought back many memories and thoughts. I had the good fortune to teach the medical libraries course with Bill at the University of British Columbia (UBC) library school. On his retirement in 1991, I took his position at BCMLS, now called the College Library. During my orientation, he shared with me, as with many people, freely. He was never judgmental and always succinct and clear in communicating. His regular column in the *BC Medical Journal* was a model I used. I remember his handwritten drafts — firm, clear hand, few mistakes.

Working on Bill's nomination to become a Fellow of MLA, we learned from Seattle colleagues that Bill had been an early influence in the US. Through his participation in a symposium in Seattle in 1962, his ideas contributed to the development of the system of Regional Medical Libraries, now the US National Network of Libraries of Medicine. He came to BCMLS from the regional library system in Prince George, British Columbia (B.C.). I have never been able to find an official record of how the word "regional" became part of the US system, but I am sure that Bill did speak at the symposium, eloquent as always, about his progressive ideas.

Bill applied the regional idea to BCMLS, which served all doctors registered to practice in B.C. Hospital libraries were used as the local presence in each community. Bill set forth every year, each spring and each fall, across the province visiting doctors and people who looked after hospital "libraries" (some worthy of the name, some, in smaller places, just a couple of shelves of books). He evaluated these libraries, suggesting purchases to update and complete the collections. In my travels around the province, following in Bill's footsteps, I met person after person who asked about him. They recalled what a friendly person he was and his good work developing and maintaining a far-flung network of some 100 hospitals. These hospital "libraries" — hospital staff to keep them in order and doctors who chaired local "library committees" — worked well with his help and back-up from BCMLS people in Vancouver. One of the few situations when I saw Bill become insistent, even strident, was when he talked

to doctors about the importance of keeping up-to-date. Many were surprised by the scathing reports he submitted to hospital administrators when the library space was not a place fit for reading and reflection. "Outreach" was invented about 20 years after Bill made his first trip, and research later showed that well-trained and informed local contacts made for successful outreach, which is exactly how Bill had set it up across B.C.

Bill was a collaborator. He always attended the MLA Annual Meeting and was an active participant in the Medical Society Libraries and the Relevant Issues Sections. He was the program chair for the 1977 annual meeting of MLA in Seattle. Bill told many stories about Pacific Northwest Chapter meetings and regularly attended the CHLA / ABSC annual meeting. He was a founder of both the B.C. and Canadian associations, the Canadian one arising from the Canadian group that came together at MLA. At BCMLS, Bill brought the staff together each morning for coffee and each afternoon for tea, and he came back to participate in these get-togethers after he retired. He believed in and knew how to engender cooperation.

To some he was Colin, to me always Bill. During my orientation to take over as BCMLS director, travelling together across northern B.C., visiting hospitals, Bill and I stopped at an art gallery in a small town. He did appreciate his art. I left when Bill started talking about a particular painting with the owner. A good stretch later, I came back. The store was supposed to be closed, but Bill and the owner were still talking, and he had become "Colin" to the owner.

Bill was a natural teacher. He thrived on sharing what he knew with everybody, but especially students in the medical library course. His favourite class was the one where he used role play, and what better way to convey the politics of hospital librarianship? The UBC library school scholarship in his name was a particular point of pride to him.

In retirement, Bill kept busy, and his smile grew with travel and opera. In 1995, he moved to Victoria with his cats. In remembering Bill, I know that he would wish us all to dance, as he was a superb dancer. He would hope we would think of his family. He was always interested in my family and shared the ups and downs of, and love for, his family. The news of Bill's passing brings a time to celebrate the fine life of a fine man, but it is still sad.

An oral history with Bill is available ([http://www.mlanet.org/about/history/c\\_fraser.html](http://www.mlanet.org/about/history/c_fraser.html)). An obituary was published in the Vancouver Sun and the Victoria Times-Colonist (<http://www.legacy.com/can-vancouver/LegacySubPage2.asp?Page=LifeStory&PersonId=15449198>).

#### Jim Henderson

*Life Sciences Library and the  
Osler Library of the History of Medicine  
McGill University  
McIntyre Medical Sciences Building  
3655 Promenade Sir-William-Osler  
Montreal, QC H3G 1Y6, Canada  
E-mail: [jim.henderson@mcgill.call.ca](mailto:jim.henderson@mcgill.call.ca)*

## **CHLA / ABSC Annual Conference 2006 celebrates 30 years**

Thirty years is a great milestone for the Canadian Health Libraries Association / Association des bibliothèques de la santé du Canada (CHLA / ABSC). Save the “personal” past of the association by posting your CHLA / ABSC memories of people, places, and events at our Memories blog. Share your thoughts and impressions about 30 years of health librarianship in Canada by contributing to the Memories of CHLA / ABSC 1976–2006 Blog at <http://weblogs.elearning.ubc.ca/memories/>.

## **PubMed news – new NLM Mobile link**

A new link, NLM Mobile, will be added to PubMed’s blue side bar. Like the Text Version link that takes you to a page providing specialized PubMed searches for text browsers, the NLM Mobile link provides access to a directory of PubMed tools that are appropriate for mobile devices. These include Palm Powered and Pocket PC handheld computers as well as newer Smartphones and BlackBerry devices. The directory links to the following:

- PubMed for Handhelds Web site, which is designed for the small screen and Web browser of any mobile device.
- PubMed on Tap software, an application that works on Palm Powered and Pocket PC handheld computers. It allows user-customized searching.
- Wireless System for Emergency Responders (WISER), software for Palm Powered or Pocket PC devices to assist first responders in hazardous material incidents.
- NCBI Bookshelf, with downloadable versions of books from the NCBI Bookshelf for any mobile device.

## **Search links added to PubMed displays**

The following fields on PubMed’s Citation format will soon become “search links” to PubMed, MeSH, and other Entrez databases:

- MeSH Terms (headings, publication types, and substances)
- Grant Support
- Secondary Source ID
- Personal Name as Subject

In addition, ClinicalTrials.gov identifier numbers (under Secondary Source ID) will link directly to the trial on the ClinicalTrials.gov Web site ([http://www.nlm.nih.gov/pubs/techbull/so05/so05\\_search\\_links.html](http://www.nlm.nih.gov/pubs/techbull/so05/so05_search_links.html)). Publication Types and Personal Name as Subject search links will also be available as search links on the Abstract display.

## **New journal – *PLoS Clinical Trials***

A new Public Library of Science (PLOS) journal will soon appear. *PLoS Clinical Trials* (eISSN 1555-5887) is an international, peer-reviewed, open-access journal published by the PLOS. The journal began welcoming submissions on 18 October 2005 and will be formally launching in March 2006. *PLoS Clinical Trials* is run as a partnership between its in-house PLOS staff and international advisory and editorial boards, ensuring fast, fair, and professional peer review. *PLoS Clinical Trials* aims to broaden the scope of clinical trials reporting by publishing the results of randomized trials in humans from all medical and public health disciplines. Trials may investigate aspects of treatment or prevention, including drug or nondrug interventions. Nondrug studies may include (but not necessarily be restricted to) investigations of devices, surgical therapies, health service delivery, behavioral, lifestyle, psychological, or educational interventions. Publication decisions will not be affected by the direction of results, size, or perceived importance of the trial. Visit <http://clinicaltrials.plosjournals.org/information.html> for further information.

## **OMNI’s “Internet Resources in Healthcare and Medicine” brochure is available for download**

<http://biome.ac.uk/about/publications/index.html#booklet>

A brand-new edition of the Organising Medical Networked Information (OMNI) – Nursing, Midwifery and Allied Health Professions (NMAP) booklet “Internet Resources in Healthcare and Medicine” is now ready to order. It provides examples of some of the quality Internet sites in health and medicine, to give a flavour of the millions of resources that are available. The Wellcome Library for the History and Understanding of Medicine and OVID have given generous support to the production of the booklet.

## **Meetings, conferences, and workshops**

### **CHLA / ABSC Annual Conference 2006 – “Pearls of Wisdom”**

For librarians who like to make conference plans in advance, the CHLA / ABSC Annual Conference in 2006 will take place in Vancouver, British Columbia, May 12–16. For details, check the conference Web site at <http://www.chla-absc.ca/2006/>.

### **Medical Library Association (MLA) Annual Conference 2006 – “Transformations A-Z”**

The annual MLA conference will take place May 19–25 in Phoenix, Arizona. For details, check the conference Web site at <http://www.mlanet.org>.

### **Living the Future 6: WOW – Where Next?**

If you are interested in a conference that focuses on future challenges facing libraries, check out “Living the Future 6” at The University of Arizona (Tucson), 5–8 April 2006. The conference is cosponsored by the Association of Research Libraries, Office of Leadership and Management Services, and the Association of College and Research Libraries. John Perry Barlow, self-professed “free agent and peripheral visionary”, is the closing keynote speaker. Details will soon be posted at <http://www.library.arizona.edu/conferences/ltf/2006/index.html>.

### **Special Libraries Association (SLA) 2006 Annual Meeting – “Where Tradition and Transformation Converge”**

SLA’s Annual Conference will take place in Baltimore, Maryland, 11–14 June 2006. The keynote speakers are Gwen Ifill (*The NewsHour with Jim Lehrer* and *Washington Week*) and Walt Mossberg (*The Wall Street Journal*).

### **Ontario Library Association (OLA) Super Conference 2006**

The Super Conference will be held February 1–4 at the Metro Toronto Convention Centre. Check the OLA Web site for program information, to register online, or to view information about subsidies or scholarships ([www.accessola.com](http://www.accessola.com)).



## **Professional development**

### **MLA CE Institute: Developing Web-based Instruction**

An online continuing education (CE) tutorial designed for MLA CE instructors, this Web-based tutorial is designed to take you through the process of formatting your CE content for delivery via the Web. The tutorial is intended for current CE instructors who already have an understanding of teaching and adult learning principles. The course will take place 12–17 March 2006 in Chicago, Illinois. Further details are available at <http://mlanet.org/education/institute/index.html>.

### **SLA's 2006 Leadership Summit – “Even Monkeys Fall from Trees: Strategies for Effective Leadership”**

If you are interested in developing your leadership skills, SLA's 2006 Leadership Summit is scheduled for January 18–21 at the Hyatt Regency Houston in Houston, Texas.

*If you would like an upcoming course, conference, or meeting included in an upcoming issue of JCHLA / JABSC, please send an e-mail to [gillian.griffith@queensu.ca](mailto:gillian.griffith@queensu.ca).*



**ERRATUM / ERRATUM****Erratum: Equity of access: can consortia and clinical knowledge programmes truly address the imbalance? An Australian view****Marijana Bacic**

**Ref.:** *J. Can. Health Libr. Assoc.* 2004 Summer;25(3):69–76.

In the above paper, on page 73, paragraph 5, line 4, the text should read the following: This has more recently been illustrated in relation to the Victorian programme CHC, when the President of Health Libraries Inc., David Lloyd, in response to the tender document released by the Department of Human Services, voiced concerns about the lack of librarian involvement in the selection of CHC resources [35].

