JOURNAL DESELECTION/SELECTION IN A VETERINARY LIBRARY: STRATEGIES USED AT WASHINGTON STATE UNIVERSITY

VICKI F CROFT
Veterinary Medical/Pharmacy Library,
Washington State University, Pullman,
WA 99164-6512 USA

ABSTRACT

Because of escalating journal prices and the proliferation of journals, libraries are facing the increasingly difficult task of ensuring that limited funds for serials are used to best meet the needs of our library users. Since 1990 the WSU Veterinary Medical/Pharmacy Library has used a number of collection management strategies to meet this goal. These have included a journal evaluation (weeding) project, creation of core lists, journal use studies, and targeting duplicated and expensive titles. Each of these projects will be briefly described and evaluated, with suggestions for future use.

INTRODUCTION

Earlier speakers have alluded to the problem of high journal prices and issues of journal ownership vs access using document delivery. With escalating journal prices and the proliferation of new journals, the task facing us all is to make sure our libraries make optimal use of limited funds in order to best meet the needs of our faculty, staff and students. I will be sharing with you a few of the strategies used by Washington State University's Veterinary Medical/Pharmacy Library to meet these goals. Whether your library contains 20 journals or 1000, these same strategies can be used.

Before I proceed, let me tell you briefly about our library and campus. Washington State University (WSU) is located in the state of Washington in the northwestern corner of the US. It is situated in a rural area of rolling wheat fields just 12 km from the University of Idaho, another land-grant university. The 62 000 volume Veterinary Medical/Pharmacy Library, which currently holds subscriptions to over 600 journals and receives many donated titles, serves both the Colleges of Veterinary Medicine and Pharmacy. Because our campus lacks a medical school, the collection contains many medical books and journals. A large science and engineering library serves the Colleges of Sciences, Agriculture and Home Economics, and Engineering. As one of just 4 veterinary schools in the western United States, the library is a regional veterinary resource for the 3 400 veterinarians in the Pacific Northwest, as well as WSU's 150 faculty, 600 DVM and Pharm.D students, and 100 graduate students.

METHODS AND DISCUSSION

Since 1980 the library has undertaken 5 journal cancellation projects. In the first 2 projects we made the easy decisions by cancelling lesser used duplicates, some non-English titles, annuals, and lesser used monographic series. We also cancelled journals in fields no longer of interest for research and teaching. In 1990 we needed to subscribe to new journals to support teaching and research needs of our users, yet we had received no money for new serials for several years. At this time we decided to implement a voluntary cancellation project, which we called the Journal Evaluation Project. Our strategy was to identify little used titles of minor importance and cancel them in order to free up money to purchase essential new journals. The process was relatively simple. Each member of our Library Advisory Committee, which at that time consisted of faculty members representing each department in our 2 Colleges and the 2 librarians, received a list of currently received journals. Each rated each journal title as: 1 (essential to teaching and research), 2 (important to teaching and research), 3 (not important/expen-

dable), or NA for no opinion. The titles receiving the lowest point scores and not rated as essential were reviewed and a list circulated to all faculty as potential cancellations. In the end 102 titles, at an average price of $85, were cancelled for a savings of $8 700, and 31 new subscriptions placed. While we did not save a great deal of money, we did free up enough to buy important new journals. This project also generated a great deal of good publicity for our library, not only among our own users, but campus-wide. This was also the first cancellation project in which database management software (dBase) was used for list compilation and tallying.

Two years later in 1992, following skyrocketing journal inflation in all areas, all campus libraries were required to cancel 12-15% of their journal budgets. Library-wide the targets were duplicate subscriptions and expensive titles. Librarians negotiated with librarians in other libraries to determine which library should retain duplicated titles, with decisions based upon subject content. There were a few titles that neither library would cancel, so these few were retained as duplicates. Some examples include *JAMA, New England Journal of Medicine, Journal of Animal Science*. The Veterinary Medical/Pharmacy Library decided to cancel *Nature, Science, Scientific American,* and *Proceedings of the National Academy of Sciences (US) (PNAS)*, hoping that we could acquire donated copies of these titles on a regular basis. A core list of journals, titles which we would not expect to cancel within the next 3-5 years, was developed. Because of the library's mission as a regional veterinary resource, many veterinary journals were designated as core titles. Potential journals to be cancelled were chosen from the non-core journal list, and a list circulated to faculty for feedback. Ultimately 120 titles, at an average price of $229 each, were cancelled. One-third were duplicates. This was a difficult process and as a result, the committee recommended that a journal use study be implemented immediately. The purposes would be to identify high cost/low use titles as possible cancellation candidates, as well as evaluate the impacts of our most recent cancellation decisions.

In November the first journal use study began. This was a simple process. Lists of currently received journals were placed in the bound and current journal shelving areas. Shelvers would manually tick titles on the list before shelving journals used in-house or circulated. Statistics were collected monthly and entered into Access, a relational database that contained records for all journal titles. At the close of 1993 statistics were cumulated and printouts generated.

In the spring of 1994 our journal use statistics were ready when yet another cancellation project began. This time our quota was $12 000. Again we decided to overcancel in order to buy new titles. This has been a pattern for each cancellation project. In order to maintain a dynamic journal collection, it is necessary to add key, new titles as required. Criteria used in journal selection are the reverse of deselection criteria: some of these include high relevance to teaching and research programs, high potential use, low cost per page, low cost per use ratio, high *Science Citation Index* impact factors, no local availability and/or easy access via document delivery. Our major goal for our 1994 project was targeting high cost-low use journals for cancellation. From the use study data we generated 2 important lists: 1) all journals costing $1 000 per year or more 2) titles in rank order from most uses to fewest uses.

These are examples from the over $999 list (table 1). Information which was entered included cost, total number of uses of bound volumes and current issues, cost per use, and *Science Citation Index* impact factors and rankings by subject. (1) *Science Citation Index* impact factors are defined as the ratio of the times a journal is cited in a year in relation to the number of articles published in that journal in the same year. Rankings by subject are lists of journals within a discipline, listed in rank order from highest impact factor to lowest. The number of uses and cost per use, coupled with impact factor rankings, enabled us to identify titles which were primary targets for cancellation. It should be noted that, while *SCI* impact factors are useful measures of journal worth in many subject areas, unfortunately they are less useful for veterinary medicine titles. A primary reason is that a number

of key veterinary publications such as the *AAEP Proceedings* are not indexed by *SCI*.

It is interesting to compare 2 equally expensive pharmacology journals, *British Journal of Pharmacology* and *General Pharmacology*. *British Journal of Pharmacology* received 133 uses at $8.48 per use and had an impact factor of 5.094, while *General Pharmacology* had 16 uses at $79.38 per use and an impact factor of .885. The large contrasts in uses, cost per use, and impact factors made it easy for us to choose which journal to cancel. Another title, *Drug Metabolism Reviews*, cost $895 per year but had only 8 uses in 1993. While some of our pharmacy faculty would have liked to retain *Drug Metabolism Reviews*, they simply couldn't justify keeping it with a $111 per use cost.

The second list, in which titles are listed in rank order by number of uses, illustrates another important byproduct of the use survey. In a veterinary school with a large emphasis on research, some basic, duplicated, non-veterinary journals may receive very heavy use. Four of the most heavily used journals were among those we had cancelled as duplicates in 1992, with one receiving almost 900 uses in 1993. It is interesting to compare our library's list of top 10 journals with that of the Texas A & M University's Medical Science Library. Our list included *Science*, *Proceedings of the National Academy of Sciences*, and *Nature* as #2, #4 and #5, while their list of the top 11 contained those three, with rankings of #1, #4, and #2 (2). The impact factors for these titles ranged from 10.48 to 22.139.

As a result of our findings *Nature*, *Proceedings of the National Academy of Sciences*, *Science*, and *Scientific American* were reinstated for $1 000, and 20 high cost/low use journals were cancelled for savings of $15 400. Our reason for reinstating the 4 very high use titles is that we concluded that our donations were too sporadic and unreliable for titles used with such frequency and regularity.

Table 3 is a summary of the 3 most recent cancellations. In the Journal Evaluation Project, many low cost titles were cancelled, but we gained positive feedback and good public relations. The 1992 project was the least successful. Without usage statistics we had no choice but to rely upon perceptions of the faculty and librarians in relation to the usage and importance of titles. Findings in one journal study indicated that high faculty rankings may prove to be predictors of high use, particularly for current year issues. (3) Of course, the use of the 4 duplicated titles was grossly underestimted. Chrzastowski in her study of journal usage and cost effectiveness in the U of Illinois at Urbana-Champaign's Chemistry Library found that 60% of the titles on their top 20 list were duplicated in other UIUC departmental libraries. These findings reinforce the need to carefully assess important duplicate titles before cancelling. (4) The 1994 project was easiest and most effective, because we were able to identify some expensive, low use titles and had usage statistics to back our decisions. Few titles were eliminated . but huge cost savings resulted.

CONCLUSIONS

Where do we go from here? Conclusions from our experiences ...

1 Journal usage statistics are very valuable. As cancellation projects become more commonplace, more and more libraries are turning to journal use and cost per use studies to assist in decision-making. Furthermore, it is important to continue to track usage and monitor changes in teaching and research needs of our users. We also need to analyze results and patterns of use from current and previous studies for use in future decision-making. The 1993 statistics were looked at only from the immediate need to cancel. It should be interesting to look at them from other vantage points. For instance, would Trueswell's 80/20 rule apply to our findings; that is, that 80% of the usage is from 20% of the collection?(6). On a more practical basis, we should generate cost per use figures for all titles on the list, not just the super expensive ones, and correlate number of uses with holdings. Journals with longer backfiles are likely to receive more uses than those for which we have fewer total volumes. For a more equitable compari-

son, we might want to compare current journal usage across the board.

2 As earlier speakers have mentioned, it is important to consider the costs of ownership (binding, maintaining serial records, claiming) as well as subscription costs, and compare them to costs of access via ILL or commercial document delivery. Texas A & M University's Medical Sciences Library has started to cancel titles if the annual cost per use is >$50, but veterinary titles are exempted since their library is also a primary resource for veterinary medicine (5). The WSU's ILL department recently completed a one month, library-wide project in which requested items were obtained from 4 commercial document delivery sources. Two-thirds of 542 requests were filled at an average cost of $13,07, including copyright fees. The majority of items were received from a vendor which uses fax exclusively for delivery and were received within 1-2 working days. I should note that this study did not include many medical and veterinary journals because those requests were filled using Docline and so were not included in this study.

3 Use of a relational database like Access is very useful for maintaining management statistics on serials, costs, uses and other factors. Starting July 1st we are using a portable bar-code reader to collect usage statistics and automatically download them into our database. Not only will this save time, but hopefully increase our accuracy. It is our belief that shelvers will be more careful in recording uses with the bar code reader because it is easy and fun to use.

4 Core journal lists have proved to be useful, as they eliminate the need to look at every title as a potential cancellation candidate. For instance, why waste your time looking at the *Journal of Small Animal Practice*, knowing that you will not cancel it?

5 We all need to continue to look for journals available electronically via the Internet at little or no cost. *Journal of Biological Chemistry* is one example of a journal with recent issues available electronically at no charge. *Emerging Infectious Diseases* is another useful title available electronically at no charge.

In conclusion, remember that no two libraries are alike. Know your users and their teaching and research needs, and consider local availability or quick and rapid accessibility from remote sources. Be aware of changes in user needs and react accordingly. Use these factors in your decision-making.

Table 1: Journals >$999 per year

Title	Cost	Uses	#/Uses	SCI IF
Am. J. Med. Genetics	$2884	97	$29.73	1.671
Archives of Toxicology	$1080	18	$60.00	1.370
Archives of Virology	$1381	86	$16.06	1.666
Brain Res. Bulletin	$1385	127	$10.91	1.692
Brit. J. Pharmacology	$1128	133	$ 8.48	5.094
Gen. Pharmacology	$1270	16	$79.38	0.885
Int. J. Pharmaceut.	$2646	32	$82.69	0.870

Table 2: Ranking of Journals by 1993 use

Title	Uses	Cost	#/Uses	Status
JAVMA	1133	$ 67	$0.06	Active
Science	812	$215	$0.26	Canc.'92
J. Immunology	743	$300	$0.40	Sci.C-anc.
Proc. Natl. Acad. Sci	659	$420	$0.64	Canc.'92
Nature	582	$425	$0.73	Canc.'92
Amer. J. Vet. Res.	550	$150	$0.27	Active
N. Eng. J. Med	489	$ 99	$0.20	Duplicate

Table 3: Summary of Cancellations 1980-1994

YEAR	FOCUS	NUMBER OF TITLES	AVE. COST/ TITLE
1980-81	Duplicated and non-English titles	116	$103
1985-86	Monographic serials, annuals	179	$116
1990	Little used, ephemeral titles	179	$85
1992	Expensive titles; duplicated titles	120	$229
1994	High cost / low use titles	20	$770

Acknowledgements

Special thanks to Bob Davis, Library Technician Head, Veterinary Medical/Pharmacy Library, WSU, for his invaluable assistance in building our dBase and Access journal databases and in generating numerous reports used in these projects.

REFERENCES

1 1992 *Science Citation Index Journal Citation Reports: a bibliometric analysis of science journals in the ISI database.* Philadelphia, ISI, 1993.

2 Top eleven most frequently used journals. *Medical Sciences Library Newsletter* (TAMU). 15 (2):2, Oct. 1994.

3 BUSTION, M., TREADWELL, J. 1990. Reported relative value of journals vs. use; a comparison. *College and Research Libraries* 51(2): 142-152, March.

4 CHRZASTOWSKI, T.E. 1991. Journal collection cost-effectiveness in an academic chemistry library: results of a cost/use survey at the University of Illinois at Urbana-Champaign. *Collection Management* 14 (1/2): 85-98.

5 FACKLER, N., Eakin, D. 1995. Collection development: journal access plan. Poster text. Poster Session, Medical Library Association, May 6-10, Washington, D.C.

6 TRUESWELL, R.L. 1969. Some behavioral patterns of library users; the 80/20 rule. *Wilson Library Bulletin* 43:458-461.

7 VYHNANEK, K. 1995. Unpublished data, Washington State University Libraries, May.