Survey And Evaluation Of Newsletters Marketed To Family Physicians

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Abstract: Background: Newsletters are marketed to physicians to provide a concise, accurate, and timely overview of the medical literature. The goal of these newsletters seems to be to present information that can be a suitable substitute for reading the original article. The purpose of this paper is to describe and evaluate newsletters pertinent to family physicians.

Methods: Newsletters appropriate for family physicians were selected by collecting newsletter advertisements and by searching newsletter directories. A 3-month sample and pertinent data were collected from the publishers. Evaluation criteria included accuracy and completeness of the abstracts, scope of coverage of the medical literature, and relevance of article sources.

Results: Eight newsletters were collected and evaluated. Accuracy was high for the evaluated abstracts. Abstract completeness averaged only 70 percent (range 55 percent to 92 percent). The type and source of abstracted articles varied widely among the newsletters.

Conclusion: Newsletters available to family physicians vary widely; personal evaluation should supplement the results of the evaluation. (1 Am Board Fam Pract 1992; 5:573-79.)

More than 2 million articles are published yearly in > 20,000 biomedical journals. Fortunately for most family physicians who find it physically and mentally impossible to read this material, much of this information is redundant, too preliminary to warrant changes in clinical practice, or irrelevant to this specialty.²

Nevertheless, keeping abreast of medical literature clinically applicable to family practice is a daunting task. Even were there enough hours in the day to read and to evaluate journal articles, the limited availability of the actual material would hamper the clinician's efforts. The widespread distribution of applicable articles among the many medical journals available makes it physically, if not financially, impossible to locate and retrieve pertinent material. Full-text computerized databases, which can enhance availability, are

associated with substantial expense of time and money.

Perhaps as an outgrowth of the explosion of new information, as well as an increased reliance on reading journals as the primary means of continuing education.²⁻⁶ several newsletters are marketed to provide the physician with a concise, accurate, and timely overview of the medical literature. Most newsletters contain abstracts with or without associated commentary by the editor(s). Although the articles or abstracts are clearly referenced, the goal of these newsletters seems to be to present information that can be a suitable substitute for reading the original article. rather than to act as a guide to pertinent clinical studies. If, then, newsletters are read instead of the original articles, the scope, accuracy, completeness, timeliness, and potential bias should be formally evaluated to determine reliability of this source of information. No published studies exist that evaluate these aspects of newsletters. The purpose of this paper is to describe an evaluation of newsletters pertinent to family physicians.

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Methods

Newsletter Selection

Newsletters suitable for this evaluation were selected by several means. Subscription advertise-

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ments received by the family physicians participating in this project were collected. Additional newsletters were found by searching the Oxbridge Directory of Newsletters, Newsletters in Print, and Medical and Health Care Books and Serials in Print, using the index terms "medicine," "family medicine," and "internal medicine."

Eligible newsletters were those that contained abstracts and pertained to either internal medicine, family medicine, or therapeutics. Newsletters focusing on other specialties and those distributed without charge (e.g., from pharmaceutical manufacturers) were not included. Also not included in this evaluation were newsletters that reviewed only one topic, such as *The Medical Letter* and *Primary Care Reports*.

The publisher of each newsletter included in the survey was contacted to request samples and to obtain cost and ordering information. Samples of newsletters published in February, March, and April 1991 were requested.

Evaluation Process

The evaluation of the newsletters focused on several aspects that would make them valuable to family physicians. If a newsletter is to substitute for broad reading of the medical literature, it must be accurate and complete. In addition, it must report the important clinical developments in medicine that are relevant to family practice. We therefore evaluated each newsletter for accuracy, completeness, scope of coverage, and relevance to family practice.

Accuracy and completeness were evaluated by comparing the information in selected abstracts with the original article. One abstract was randomly chosen from each issue of the monthly newsletters published in February, March, and April 1991; for biweekly newsletters, one abstract was randomly chosen from the first issue published in each of these months. Editorials, reviews, and news articles were not included.

The corresponding article referenced by each abstract was obtained, and the article and abstract were compared. Accuracy was assessed by comparing the numeric data presented in the abstract with the data presented in the original article.

Completeness was evaluated by comparing the content of the abstracts with the information presented in the original article. The recently published guidelines for more informative abstracts

of clinical articles, 1 as revised by Haynes, et al., 10 were used (Table 1). These guidelines consist of 18 criteria deemed necessary to evaluate the validity of a clinical investigation. Completeness was assessed by comparing the number of criteria present in the sample of abstracts with the number of criteria present in the original articles. If at least five of the 18 criteria for evaluation of completeness were not present in the original article, the article and abstract were discarded, and the nearest neighbor in the randomization process was selected.

The scope of coverage of the medical literature was also evaluated. Three samples of each newsletter were evaluated to determine the type of articles abstracted. Articles were categorized as non-clinical or other studies, case reports, reviews or editorials (which also included meta-analysis), and controlled clinical trials. The nonclinical or other studies included case series, retrospective studies, studies of prognosis, studies describing basic pharmacology or pathophysiology, surveys, descriptive reports, and economic evaluation studies.

Relevance to family practice was evaluated by separating the medical literature into four categories (Table 2): (1) family practice specialty literature, (2) high-impact medical journals, (3) core specialty journals relevant to family practice, and

Table 1. Criteria for Evaluation of Completeness.

Content Area	Completeness Criteria					
Study design	Statement of objective					
	Statement of research design					
	Duration of follow-up					
Setting of study	Number of patients in trial					
	Number of dropouts or reasons specified					
	Method of patient selection stated					
Interventions	Statement of exact treatment or intervention					
	Method of intervention (name[s] of drug if applicable)					
	Route(s) of administration (if applicable)					
	Dose(s) of drug(s) (if applicable)					
	Duration of intervention					
Outcome measurements	Endpoints stated					
	Quantitative results given					
	Adverse reactions mentioned, if any					
Statistics stated	P value					
	Confidence interval					
	Sensitivity, specificity, or likelihood ratio					
	Power					

^{*}Adapted from the Annals of Internal Medicine, Haynes, et al. 1,10

(4) other journals that did not fit into the first three categories.

High-impact journals were defined as those containing articles that consistently influence medical care as measured by the number of times the articles published in each journal are subsequently cited in other reports. We arbitrarily chose the 15 most frequently cited journals as high-impact journals for the purposes of this study, because citation rates declined quickly after this cutoff.

The list of relevant specialty literature was derived by first examining the required rotations in specialty areas for family practice residency requirements.¹² Major clinical research journals representing work in each of these specialties were listed using as our base the holdings of our community hospital library.

Results Newsletter Descriptions

Nine newsletters were found that met the criteria for evaluation. Samples were obtained for eight; the ninth, Family Practice Alert, is no longer published. The characteristics of the eight newsletters are presented in Table 3. Four newsletters are published monthly, and four are published every 2 weeks. Costs for the newsletter alone (without continuing education credit) range from \$27 to \$96 for a 1-year subscription. Continuing medical education credit is available from three newsletters at an additional cost of \$30 to \$50 per year for 12 to 25 category I credits.

The format and content of the newsletters are quite different. Physicians' Drug Alert, Drug Alerts for Internal Medicine, Internal Medicine Alert, The Family Practice Newsletter, and The Ambulatory Medicine Letter contain extensive abstracts. These abstracts are generally followed by a commentary section, designed to place the abstracted article in context with other medical literature on the topic. The commentary sections in Internal Medicine Alert are quite extensive. In addition, The Ambulatory Medicine Letter also includes a Conclusion/Critique section that critically appraises the study. Physicians' Drug Alert frequently quotes and references results from other related studies.

Medical Sciences Bulletin has several different sections in addition to abstracts, including reviews of newly approved drugs, reviews of clinical trials,

Table 2. Journal Categories for Determining Relevance to Family Practice.

Family practice specialty literature

Tournal of Family Practice American Family Physician Tournal of the American Board of Family Practice Family Practice Research Journal Family Medicine High-impact journals The Lancet The New England Journal of Medicine British Medical Journal TAMA Annals of Internal Medicine American Tournal of Medicine Proceedings of the Society for Experimental Biology and Medicine Archives of Internal Medicine Acta Medica Scandinavica Deutsche Medizinische Wochenschrift Medical Tournal of Australia Canadian Medical Association Tournal

Core specialty journals

Nouvelle Presse Medicale

American Journal of the Medical Sciences

American Heart Journal American Journal of Cardiology American Journal of Diseases of Children American Journal of Emergency Medicine American Journal of Obstetrics and Gynecology American Journal of Ophthalmology American Journal of Psychiatry American Journal of Surgery Annals of Emergency Medicine Annals of Surgery Archives of Dermatology Archives of Neurology Archives of Ophthabnology Archives of Otolaryngology Archives of Surgery Chest Circulation Clinical Obstetrics and Gynecology Critical Care Medicine Diabetes Diabetes Care Geriatrics Journal of Pediatrics Journal of the American College of Cardiology Journal of the American Geriatrics Society Journal of Urology Morbidity and Mortality Weekly Report Neurology Obstetrics and Gynecology

Southern Medical Journal
Other journals
Any journal not listed above

Quarterly Journal of Medicine

Orthopedics

Pediatrics

Table 3. Characteristics of the Newsletters.

Newsletter	Address and Telephone	Number of Issues per Year	Cost per Year (\$)	CME*	Year- End Index	Abstracts or Articles	Number of Pages	Average Number of Abstracts or Articles
Physicians' Drug Alert	M.J. Powers & Co. 374 Millburn Ave. Millburn, NJ 07041 201-467-4556	12	53	No	Yes	Both	8	15
Medical Sciences Bulletin	Pharmaceutical Information Assoc., Ltd. 2761 Trenton Road Levittown, PA 19056 215-949-0490	12	27	No	Yes	Both	8	11 (plus news, reviews)
Clinical Abstracts/ Current Thera- peutic Findings	Harvey Whitney Books P.O. Box 42696 Cincinnati, OH 45242 513-793-3555	12	32	No	Yes (periodic)	Abstracts	8	64
Journal Watch	Journal Watch P.O. Box 9085 Waltham, MA 02254-9085 800-843-6356	24	89	Yes (+90)	Yes	Abstracts	8	28 (plus brief synopsis of review articles)
Internal Medicine Alert	American Health Consultants Bldg 6, Suite 400 3525 Piedmont Road, NE Atlanta, GA 30305 800-688-2421	24	96	Yes (+75)	Yes	Abstracts	4‡ plus comments	4‡
The Ambulatory Medicine Letter	J.B. Lippincott Co. Downsville Pike Route 3, Box 20-B Hagerstown, MD 21740 800-638-3030	24	79	Yes (+31)	Yes	Abstracts with comments	4	4
The Family Practice Newsletter	Family Practice Residency Program P.O. Box 669 Mt. Gretna, PA 17064 717-964-1861	24	49	Yes	Yes	Abstracts with comments	4	11
Drug Alerts for Internal Medicine†	M.J. Powers & Co. 374 Millburn Ave. Millburn, NJ 07041 201-467-4556	12	55	No	Yes	Abstracts with comments	8	15

^{*}CME — continuing medical education.

and a Focus On section, which reviews a group of recent articles on a particular subject. Other periodic features include Conference Highlights, Toxicology, Biotechnology Notes, and Therapeutic Frontiers.

Journal Watch and Clinical Abstracts/Current Therapeutic Findings contain only abstracts and, as a result, cover many more articles than the other newsletters, an average of 28 abstracts per month in Journal Watch and 64 abstracts per

month in Clinical Abstracts/Current Therapeutic Findings versus an average of 10 per month in the remaining newsletters. The Journal Watch abstracts are generally three or four paragraphs, whereas the abstracts of Clinical Abstracts/Current Therapeutic Findings are usually only a few lines.

Evaluation

Four abstracts originally selected for evaluation were discarded because the original article cited did

[†] Physicians' Drug Alert and Drug Alerts for Internal Medicine have been combined into Primary Care Medicine Drug Alerts, available from the same address.

[‡]At the time of the evaluation; it is now 8 pages and contains more abstracts.

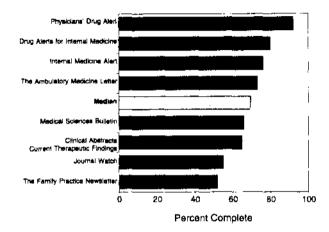


Figure 1. Clinical evaluation: percentage of criteria appearing in abstract.

not contain at least five of the required 18 criteria for evaluation. The neighboring abstracts in the randomization were chosen, maintaining three abstracts for evaluation from each newsletter.

Overall, accuracy was high for the abstracts evaluated. Data-reporting errors were found in two of the 24 evaluated abstracts (8.3 percent). An abstract in *Medical Sciences Bulletin* reported a dose of cholestyramine as 24 "mg" instead of 24 "g", and *Clinical Abstracts/Current Therapeutic Findings* contained one abstract that reported three incorrect pharmacokinetic values.

The ranking of the newsletters by evaluation of completeness is shown in Figure 1. On average, the newsletter abstracts presented 70 percent of the required information available in the original article. *Physicians' Drug Alert* contained the greatest percentage of information (92 percent), whereas *Journal Watch* had the least, with only an average of 55 percent of the required information from the original article present in the abstract. The other newsletters ranged from 65 percent to 80 percent, with a median value of about 70 percent.

The newsletters differed markedly with regard to the scope of coverage of the medical literature (Table 4). Controlled clinical trials, perhaps the most conclusive form of medical evidence, were not well-represented in any of the newsletters. Coverage of controlled clinical trials ranged from 18.6 percent of the abstracts in the Physicians' Drug Alert to 44 percent in Internal Medicine Alert.

Reviews, meta-analyses, and editorials were largely ignored by most newsletters, although *Medical Sciences Bulletin* and *The Family Practice*

Newsletter contained reviews and editorials written by their editorial staffs.

Case reports accounted for none of the articles abstracted in *The Ambulatory Medicine Letter* and only 2.4 percent (n = 2) of the articles summarized in *Journal Watch*. On the other hand, more than 25 percent (n = 51) of *Clinical Abstracts/ Current Therapeutic Findings* and nearly 40 percent (n = 18) of *Drug Alerts for Internal Medicine* consisted of abstracts of single cases. Abstracts of nonclinical or other studies made up a large proportion of several newsletters; for example, 72.3 percent of the contents of *Journal Watch* and 56.2 percent of the articles in *Medical Sciences Bulletin* were in this category.

We also found a disparity in the sources of abstracted articles. The Ambulatory Medicine Letter, Journal Watch, Internal Medicine Alert, and The Family Practice Newsletter abstracted many articles from journals we judged to be pertinent to family practice. More than 80 percent of articles abstracted in these newsletters were obtained from family practice, high-impact, and core specialty journals (Figure 2).

Discussion

We found in our evaluation of eight newsletters marketed to family physicians that wide variations exist as to price, format, scope, and content. This finding should be expected — the

Table 4. Scope of Coverage of the Medical Literature by Percent.

Newsletter	Controlled Clinical Trials	Review- Editorials	Non- clinical Reports	Case Reports	
The Ambulatory Medicine Letter	33.3	11.1	55.6	0.0	
Clinical Abstracts/ Current Thera- peutic Findings	21.3	2.1	50	26.6	
Drug Alerts for Internal Medicine	28.3	13.1	19.6	39.1	
The Family Prac- tice Newsletter	21.1	13.2	52.6	13.2	
Internal Medicine Alert	44.0		48.0	8.0	
Journal Watch	24.1	1.2	72.3	2.4	
Medical Sciences Bulletin	31.2		56.2	12.5	
Physicians' Drug Alert	18.6	20.9	23.2	37.2	

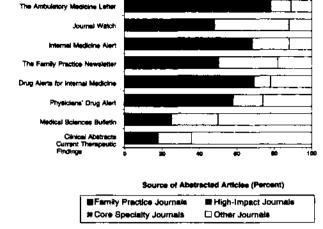


Figure 2. Sources of abstracts in newsletters. Pertinent journals include family practice, high-impact, and core specialty journals.

editorial intent of each newsletter is undoubtedly different.

Journal Watch and Clinical Abstracts/Current Therapeutic Findings attempt to survey a wide variety of medical literature, providing capsule summaries of the results. These abstracts quickly provide the information, though the paragraph style of Journal Watch is easier to read and comprehend than the abrupt style of Clinical Abstracts/Current Therapeutic Findings.

Medical Sciences Bulletin covers a wide variety of topics, using news articles, reviews, and abstracts. The Family Practice Newsletter is written in a personal style that makes no attempt to hide the biases of the editor.

Two alert newsletters, Drug Alerts for Internal Medicine and Physicians' Drug Alert, focus on new findings. Almost 40 percent of the reports in each of these newsletters were of single cases of adverse reactions to drugs. The similarly titled Internal Medicine Alert, however, had the highest percentage of controlled clinical trials, of which more than 80 percent were from journals relevant to family practice.

We were surprised to see so few citations from family practice literature in the newsletters we surveyed. This low representation could reflect the editorial thinking that family practice journals are widely distributed and that coverage in a newsletter is therefore unnecessary.

The marketing focus used by the publishers varies among the newsletters. Every issue of *Journal Watch* contains the disclaimer that, "Summaries... are not intended for use as the sole basis

for clinical treatment nor as a substitute for reading the original research." On the other hand, a brochure for *The Ambulatory Medicine Letter* seems to suggest otherwise: "No more wading through stacks of journals — our experts do it FOR you." We believe the latter quotation probably more accurately represents the marketing of most newsletters and the benefit anticipated by newsletter readers. Many readers would not have the time, inclination, or ability to obtain and read the original article, and a newsletter can be an alternative means to survey the medical literature of importance to family practice.

Newsletter readers must be assured that the abstracts in the newsletter are accurate, complete, and represent the important developments occurring in medicine. The information presented in the abstracts we analyzed was generally accurate, though not necessarily complete. An average of only 70 percent of the information required to evaluate the validity of a study was present in the evaluated abstracts. As a result, the reader must verify the integrity of the original study based on the limited information given in the abstract. Alternatively, the reader could obtain the original article to review (which seems to defeat the purpose of a newsletter) or assume that the editors of the newsletter would not select an article that was not sound and simply take the information presented at face value. None of these choices seems to be optimal.

There are several limitations to this study. We might have missed newsletters of interest to family physicians that are not widely marketed. We did not include in our evaluation *The Medical Letter, Primary Care Reports, Pediatric Notes,* and probably many other useful newsletters that did not meet our criteria. We also did not include abstracting services in other formats, such as computer-based or index card systems.

Many of our criteria for this study are subjective and represent our personal opinions regarding the valuable components of a newsletter. We did not attempt to evaluate less tangible newsletter characteristics, such as design, layout, typography, and readability; these factors can greatly influence the usefulness of a publication.

Many publishers of the newsletters surveyed are willing to send prospective subscribers a sample for evaluation. Personal examination

and evaluation to determine the suitability of the newsletter for the reader's purpose should be used to supplement the results of our evaluation of completeness and accuracy in selecting a newsletter.

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