

Current Comments®

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An International Perspective on Drug Bulletins and Their Place in the Review Literature

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ISI® has had a longstanding relationship with pharmaceutical research. As a matter of fact, *Current Contents*® (CC®) was founded as a result of consulting work I performed for Miles Laboratories and other firms.¹ It soon became apparent that CC could be equally useful to academic researchers and clinical investigators, and the rest is scientometric history.

CC has covered the journal literature to the satisfaction of most readers, but there sometimes have been questions about the adequacy of our coverage of publications like the *Medical Letter*. Obviously, with subscriber bases ranging up to 85,000, that held by the *Drug and Therapeutics Bulletin*, these publications warrant coverage.

As Andrew Herxheimer reports in the essay that follows, there is a great deal of valuable information in drug "bulletins" that is of potential value to our readers.

Although Andrew and I have been acquainted for some time, it was not until we met in London a few years ago that the idea of a review on the impact of these bulletins occurred to me. I asked if he would consider doing such an article. At just about that time, he published a piece in *The Scientist*®,² on the responsibility of journal editors to authors, which caused quite a stir. Clearly, he has strong ideas on ethical issues in science or he would not be devoting so

much of his energy to objective drug evaluation.

Andrew is certainly well qualified to do an article on the history and impact of drug bulletins. He received his medical training at St. Thomas's Hospital Medical School, London, England, where he later lectured in therapeutics. In addition to this, and the appointments during his career as a Nuffield Medical Fellow in the Department of Pharmacology, University of Utah, Salt Lake City, senior lecturer in pharmacology, London Hospital Medical College, and senior lecturer in clinical pharmacology and therapeutics, Charing Cross and Westminster Medical School, London, Andrew is the editor (and was one of the founders, in 1963) of the *Drug and Therapeutics Bulletin*, and has been chairman of the International Society of Drug Bulletins since 1986.

The reader will find this article both clear and compelling in its treatment of this important field of publications. Among the items that I personally found surprising, not being a medical professional, was the fact that the content of drug bulletins varies so much from country to country. I assumed that drug and medical therapies were relatively similar worldwide. I have no doubt that you, too, will find information in this essay that is both surprising and interesting.

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Drug Bulletins Are Part of the Scientific Literature

By Andrew Herxheimer

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Drug bulletins are short, critical review publications intended to inform mainly physicians, but also pharmacists, about drugs and other treatments and to help them make better treatment decisions. Such bulletins have multiplied in the last 25 years. They fill a gap in the scientific literature between specialized in-depth review articles and editorials in leading medical journals. Their contents should be listed in *Current Contents*® (CC®) and included in the major databases covering the medical sciences.

The word *bulletin* suggests topicality and brevity without comprehensiveness. A drug bulletin is a special type of professional review journal, primarily for prescribers, but also for anyone else interested in how drugs are used. To explain how they fit into the scientific literature, it is necessary to describe the context in which they are used and produced.

Prescribers' Sources of Information

Prescribers get printed information about the use of drugs from a variety of sources. Starting from the large and complex, these are textbooks of pharmacology and of therapeutics; specialized books, e.g., about adverse effects of drugs, or about the management of particular conditions; medical journals; formularies, local or national, that list drug formulations and usually contain some recommendations; official prescribing information issued by pharmaceutical companies with the approval of national registration authorities (in the US these are printed in the *Physician's Desk Reference*, elsewhere they are often called data sheets); drug bulletins; and promotional material from the industry.



Andrew Herxheimer

Books take a long time to produce and are therefore liable to be out-of-date. This is to some extent true of formularies, too, but these can be more easily remedied. Material in bulletins and in medical journals, on the other hand, is produced more quickly and can be updated during production. The information in data sheets varies considerably among countries and is strongly influenced by the quality and strength of the respective national drug authority in dealing with the promotional intentions of the industry. Data sheet information is hard to use, partly because companies regard it as a protection against liability claims. The text often has to be negotiated between a company and the regulators, and this causes delays. Advertisements and other promotional matter can provide useful information, but their primary purpose is to advocate the use of a drug and to sell it—not to help prescribers use it with discrimination and skill.

Books, medical journals, formularies, data sheets, and bulletins are typically used in quite different ways. Books are good for giving discursive general background infor-

mation and for treating subjects in depth. Review articles in medical journals do this in a more limited way, and a few journals have a regular slot for critical articles on therapy—for example, the Norwegian and Dutch medical journals. These articles fulfill the same functions as drug bulletins.

Formularies vary in quality among different countries. They are more or less comprehensive and show the range of drugs that can be used for a particular purpose; some explain how to make good choices from this range. They also may give the essential information needed to use the drugs, but lack space to give much background. Data sheets provide more detailed information about individual drugs, expressed from the viewpoint of the manufacturer and the regulatory agency, but often the information is difficult for prescribers to translate into action.

How Drug Bulletins Begin

Bulletins were started to help prescribers make more rational decisions on treatment, partly by assessing the claims made for drugs and putting them into perspective. The first US-based bulletin was the *Medical Letter*, founded in 1959 by Harold Aaron, MD, and Arthur Kallet in New York. Aaron long had been the medical adviser, and Kallet the director, of Consumers Union (CU), and their experience at CU convinced them that physicians were like consumers in that they needed much more critical and reliable information than they were getting—in this case about drugs. The publication had to be completely independent of the pharmaceutical industry and easy for busy physicians to read and use. Articles, therefore, had to be brief and well organized.

In 1962, I persuaded Consumers' Association in London to publish a British edition of the *Medical Letter*. However, differences in medical practice and in the use of drugs on the two sides of the Atlantic turned out to be more important than we at first realized.

General practice was established as a specialty in Britain much earlier than in North

America and was strongly supported within the National Health Service. In the US, the competitive climate of private practice delayed the emergence of family medicine. But it was perhaps more important than that new drugs tended to be introduced in Britain before they became available in the US.

Consequently, some *Medical Letter* articles were of little interest to British physicians, who, in turn, needed some articles that were irrelevant for American readers. This led us to become independent in 1963 as the *Drug and Therapeutics Bulletin (DTB)*. That was two years after the UK Ministry of Health started *Prescribers' Journal*, with similar aims, but in a different style, aimed more specifically at family physicians. Since then, drug bulletins have sprung up in many countries. There are now more than 50, published in many languages. These bulletins differ more than one might expect because they have to deal with particular national therapeutic attitudes and traditions.

What Bulletins Do

Drug bulletins are written from a different point of view from that of most articles about drugs in medical journals. They examine therapeutic problems and drugs from the prescriber's standpoint. They review what a drug does and discuss the scientific evidence of its value in practice, noting if important information is missing or unreliable. They compare therapeutic strategies and competing drugs, offering conclusions about when and in what ways a treatment is worth using.

Bulletins aim to be independent of the pharmaceutical industry and, as far as possible, of governmental agencies. They also aim to present readers with impartial and unbiased professional material and discuss controversial subjects that the industry or an official government publication may not be able to raise. If necessary, they can criticize individual advertising claims, therapeutic recommendations, and sometimes even offi-

Table 1. The major drug bulletins. Abbreviations: A=abstracts, Ad=adaptations, CRev=critical reviews, OM=original material, Tr=translations, []=publication was interrupted, /ps/=psychiatry only. E=English, Fr=French, Ge=German, I=Italian, Sp=Spanish.

Year Started	Title, City, Country	Types of Material	No. of Issues per Year	Language
1959	The Medical Letter, New Rochelle, NY, US	CRev	26	E, Sp, I
1961	Prescribers' Journal, London, UK	OM	6	E, Sp, I, Fr
1962	Drug and Therapeutics Bulletin, London, UK	CRev	26	E
1966	International Drug Therapy Newsletter, Baltimore, MD, US /ps/	CRev	10	E
1967	Der Arzneimittelbrief, Berlin, FRG	CRev A	12	Ge
1967	Rational Drug Therapy, Bethesda, MD, US	CRev	12	E
1969	Drug Information Monographs, Stockholm, Sweden	CRev	4	E since 1983
1970	Arznei-telegramm, Berlin, FRG	CRev A	12	Ge
1971	FDA Drug Bulletin, Rockville, MD, US	CRev	6	E
1972	Pharma-flash, Geneva, Switzerland	CRev	8	Fr
1974	Folia Pharmacotherapeutica, Brussels, Belgium	CRev	10	Fr & Flemish
1975	La Lettre Medicale, Paris, France	CRev	10	Fr
1977	Australian Prescriber, Canberra, Australia []	CRev	6	E
1977	Informacion Terapeutica de la Seguridad Social, Madrid, Spain	CRev Tr	12	Sp
1977	Informazioni sui Farmaci, Reggio Emilia, Italy	CRev Tr	4	I
1979	La Lettre du Psychiatre, Paris, France /ps/	CRev	10	Fr
1979	Pharma-kritik, Wil, Switzerland	CRev	24	Ge, E
1980	Physicians' Drug Alert, Millburn, NJ, US	A	12	E
1981	La Revue Prescrire, Paris, France	CRev A	10	Fr
1982	Medicamentos y Terapeutica, Washington, DC, US	Tr	4	E
1985	Ricerca & Pratica, Milan, Italy	CRev	6	I
1986	Drug Disease Doctor, Calcutta, India	CRev Ad	6	E
1986	Pharmainformation, Innsbruck, Austria	CRev	4	Ge
1986	The Informed Prescriber, Tokyo, Japan	CRev Tr	12	Japanese
1987	Zimbabwe Drug Bulletin, Harare, Zimbabwe	CRev	4	E
1987	WHO Drug Information Bulletin, Geneva, Switzerland	CRev A	4	E

cial licensing decisions. Of course, general medical journals also can do this, but the dependence of many journals on pharmaceutical advertising can inhibit them, even though most editors have nothing to do with advertisements. Furthermore, bulletins tend to be read by doctors who want to improve the quality of their prescribing. Reviews and comment in general journals may reach these doctors less easily.

Bulletins publish a wide range of material, but they vary greatly in scope and forthrightness. They most often include assessments of individual drugs, especially new ones, and of groups of related drugs, pointing out scientifically dubious claims made for them. They also publish material relating to evaluations of new treatments over established ones; the management of particular therapeutic problems; the relationship of drug and nondrug treatments in particular conditions; the interpretation of important clinical trials and epidemiological studies;

adverse effects of treatment, and how to avoid or minimize them; the monitoring of drug treatment; what information patients need from health professionals about particular treatments; review of old and perhaps obsolescent drugs; and, discussion of prescribing policies and of regulatory issues. Many of these are important topics and issues not addressed adequately in medical and scientific journals. These journals tend to focus on more strictly scientific questions.

Another important difference between most reviews in conventional journals and those in drug bulletins lies in the way they are produced. Bulletin articles tend to be produced by a group rather than by one individual who is helped by an editor.¹ This is one reason, in many bulletins, the articles are unsigned: they embody contributions from many people. However, even where articles are signed, the author's position may be substantially modified by the edi-

Table 2. Number of citations to drug bulletin articles in the *SCI*[®], 1988 and 1989.

Bulletins	Number of Citations in Year	
	1988	1989
<i>(In English)</i>		
The Medical Letter, US	200	221
Drug and Therapeutics Bulletin, UK	165	108
International Drug Therapy Newsletter, US	13	25
Prescribers' Journal, UK	17	9
Australian Prescriber	7	8
WHO Drug Information Bulletin	3	2
<i>(In Other Languages)</i>		
Der Arzneimittelbrief, Germany	5	2
Arznei-Telegramm, Germany	5	2
Pharma-Kritik, Switzerland	3	2
Ricerca & Pratica, Italy	2	3
La Revue Prescrire, France	2	0

tors. The articles aim to give a balanced view or even a consensus, but not a wishy-washy compromise. If important facts are not known, this is stated.

Where Bulletins Fit In

The scientific community regards the scientific literature as consisting basically of research papers and of reviews. Reports of original research appear in many specialized and a few general scientific journals, each with its own editorial criteria and standards of quality for accepting papers. They try to distinguish reliable from dubious and important from unimportant research. Differences of opinion of what is reliable, or important, account in part for the existence of so many scientific journals.

Reviews aim to give scientists an overview of current or recent work on one topic. They range from the long and comprehensive, citing hundreds of references, to the short and selective, citing only a few. Most long reviews appear in special review journals, monographs, or books. Short ones, often editorials, tend to appear in journals

that contain mainly original research. The best reviews provide a critical analysis and synthesis of current knowledge and represent original and valuable contributions to science.

A third, more recent component of the scientific literature is material dealing with the activities of scientists and the processes of science—its politics, its funding, science education, and the application of science. Some of these aspects get attention in general journals, such as *Science*, *Nature*, and *Lancet*. Others, such as scientometrics and "journalology," are still confined to a few specialized publications.

How do drug bulletins fit into this taxonomy? They predominantly publish short reviews concerned with science and its application in medicine. Other ingredients include news and comment, opinion pieces, and very occasional reports of original surveys or tests. Most articles in bulletins cite references. Table 1 lists 25 major bulletins whose contents may be considered relevant internationally. Several of them, the *Medical Letter* and *DTB*, and recently *Pharma-Kritik*, are published in more than one language, and articles from these, and occasionally other bulletins, also are reprinted or summarized in additional countries.

These bulletins carry critical evaluations of original research published in the medical journals listed in *CC* and the *Science Citation Index*[®] (*SCI*[®]), and their inclusion in these databases would help users get a more balanced and up-to-date view of topics in therapeutics. This is important for three reasons.

First, it will help to bridge the gulf between the scientists doing basic research and the clinical scientists and practicing physicians who are building on their work. At present they get too little feedback—they work in quite different settings, read different journals, and go to different meetings. In the pharmaceutical industry, the research scientists are relatively insulated from medicine. They tend to communicate with the outside world through the medical and per-

Table 3. Bulletins of mainly European interest. Abbreviations: A=abstracts, Ad=adaptations, CRev=critical reviews, OM=original material, SP=scientific papers, Tr=translations, []=publication was interrupted, /ps/=psychiatry only. E=English, Fr=French, Ge=German, Sp=Spanish, Cz=Czechoslovakian, (E)=abstracts in English.

Year Started	Title, City, Country	Types of Material	No. of Issues per Year	Language
1950	Gyogyszereink, Budapest, Hungary	SP A	12	Hungarian (E)
1957	Therapeutic Notes, Wellington, New Zealand	CRev A	irreg	E
1961	Internistische Praxis, Munich, FRG	CRev OM A	4	Ge
1963	Pharmaca, Zagreb, Yugoslavia	CRev SPA	4	Serbo-Croatian (E)
1967	Geneesmiddelenbulletin, Rijswijk, The Netherlands	OM	24	Dutch
1974	Arznei-Verordnung in der Praxis, Cologne, FRG	OM	8	Ge
1973	The Prescriber, Colombo, Sri Lanka []	CRev Ad	4	E
1974	Bordeaux Pharmacologie, France	CRev	4	Fr
1976	Bilten (Hospital Drug Bulletin), Zagreb, Yugoslavia	CRev	10	Serbo-Croatian
1978	Drugs Bulletin, Chandigarh, India	CRev Ad	4	E
1980	Dossier du CNIMH, Paris, France	OM	6	Fr
1981	Farmakon, Jakarta, Indonesia	CRev	12	Indonesian
1982	Drug Information Newsletter, Singapore	OM	4	E
1984	Boletin Terapeutico Andaluz, Granada, Spain	CRev	12	Sp
1984	Eastern Mediterranean Drugs Digest*, Alexandria, Egypt	Tr Ad	2	E & Arabic
1984	Praktisk Laegemiddel-Information (PLI), Copenhagen, Denmark	CRev	12	
1984	Syntagographia (=prescription), Athens, Greece	CRev	2	Greek
1985	Drug Data, Belfast, Northern Ireland	CRev	3	E
1985	Farmacos, Costa Rica	CRev SP	?	Sp
1986	Succus, Prague, Czechoslovakia	OM	2	Cz (E)
1987	BIP (Bulletin d'Information Pharmacotherapeutique), Algiers, Algeria	CRev	4	Fr
1987	Butleti d'Informacio Terapeutica, Barcelona, Spain	CRev	10	Catalan
1987	Lembaran Obat dan Pengobatan, Yogyakarta, Indonesia	CRev	12	Indonesian
1987	CMA-Boletin, Cuzco, Peru	OM	6	Sp
1988	Drug Information Bulletin, Peradeniya, Sri Lanka	OM	4	E
1989	Drug Information Bulletin, Dar es Salaam, Tanzania	OM A	4	E
1990	MeReC Bulletin, Liverpool, UK	CRev	12	E

* =Prescription Event Monitoring

haps the marketing departments, which interpose their own priorities and interpretations.

The second reason is the well-established publication bias toward positive findings,² which operates strongly in favor of new drugs. One of its causes is the way in which the pharmaceutical industry funds clinical research programs and gets favorable findings published, often in reports of sponsored meetings and special journal supplements.

Thirdly, the *SCI* shows that two of the longest established drug bulletins published in English are already frequently cited in the literature (Table 2). It would be interesting to know in which journals they are mainly cited, but this information cannot at present be retrieved from the *SCI* database. Newer bulletins, and especially those published in other languages, are less widely known and

so are missed by many potentially interested readers.

Local Drug Bulletins

Table 3 lists bulletins that are of interest mainly in their country or region of origin. They span a wide range in quality and style. Some provide little more than is already widely available elsewhere; with others, the language, e.g., Catalan, Greek, Hungarian, Indonesian, makes them inaccessible to most potentially interested readers outside their countries.

Adverse Drug Reaction Bulletins

The main bulletins dealing only with adverse drug reactions (ADRs) are listed in Table 4. Most of these bulletins report origi-

Table 4. National adverse drug reaction bulletins. Abbreviations: ARR=adverse reaction report, CRev=critical reviews, SP=scientific papers. E=English, Ge=German.

Year Started	Title, City, Country	Types of Material	No. of Issues per Year	Language
1964	Adverse Drug Reaction Bulletin, Newcastle, UK	CRev	6	E
1965?	Notices from the Swedish ADR Committee, Uppsala, Sweden	CRev ARR	2	Swedish & E
1975	Current Problems, London, UK	CRev	irreg	E
1983	Australian Adverse Drug Reaction Bulletin, Canberra, Australia	CRev ARR	3	E
1983	PEM* News, Southampton, UK	SP CRev	1	E
1985	Bulletin Bijwerkingen van Geneesmiddelen, Leidschendam, The Netherlands	CRev ARR	1	Dutch
1986	Arznei-Telegramm Netzwerk Gegenseitiger Information**, Berlin, FRG	ARR	irreg	Ge
1988	Butlleti Groc***, Barcelona, Spain	CRev ARR	4	Catalan

*=Prescription Event Monitoring

**=Network for mutual ADR information

***=Yellow bulletin

nal findings that emerge from spontaneous ADR reporting systems and have been collated and investigated. They are an important primary source of information about serious and uncommon ADRs. In addition, several ADR reporting centers in different countries produce reports for the doctors in their catchment area.

The International Society of Drug Bulletins

The International Society of Drug Bulletins (ISDB), founded in 1986 with the support of the World Health Organization Re-

gional Office for Europe, aims to promote an international exchange of information on drugs and therapeutics, to encourage and assist the development of professionally independent drug bulletins in all countries, and to facilitate cooperation among bulletins. One project is to produce an index of articles published in drug bulletins, to make them more easily accessible and to reduce duplication of work. ISDB hopes to publish the first index during 1991. Another project, which will take longer, is to establish a database of articles cited in bulletins, including a brief evaluation of the cited work.

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