Commentary

The Case for Multiple Database Searching in Podiatric Medicine

To the Editor:

Electronic databases play an increasingly important role in providing access to scholarly literature in all health-science professions. Unfortunately, no database will ever provide complete coverage of the literature, as it has been estimated that more than 14,000 publications exist related to medicine and allied health, with more and more titles being added every year. Consequently, electronic databases must be selective as to which journals they index. MEDLINE, the medical and scientific indexing database maintained by the National Library of Medicine (NLM), currently indexes 3,900 journals, accounting for approximately 30% of formally published biomedical material.[1] The high profile of the MEDLINE database has given rise to the common perception that database searching is synonymous with "searching MEDLINE." This is unfortunate, as other high-quality databases exist that have equal, or perhaps greater, relevance to the field of podiatric medicine.

There are currently eight major journals of direct relevance to podiatric medicine: the *Journal of the American Podiatric Medical Association*, the *Journal of Foot and Ankle Surgery*, *Clinics in Podiatric Medicine and Surgery*, *Foot and Ankle International*, *The Foot*, *Foot and Ankle Surgery*, the *British Journal of Podiatry*, and the *Australasian Journal of Podiatric Medicine*. Only four of these journals—the *Journal of the American Podiatric Medical Association*, *Foot and Ankle International*, the *Journal of Foot and Ankle Surgery*, and *Clinics in Podiatric Medicine and Surgery*—are retrievable through MEDLINE. This means that a literature search confined to the MEDLINE database will provide access to only half of the major journals in the field. Despite the extensive review process employed by the NLM when selecting journals for indexing,[2] it has been suggested that inclusion in MEDLINE is not a reliable indicator of journal quality.[3] Furthermore, when conducting a literature search, it is the quality of the individual articles, rather than the perceived quality of the journal, that should be the major consideration. For example, a randomized controlled trial published in *The Foot* will not be found when performing a MEDLINE search, yet case reports of limited scientific value published in the four MEDLINE-indexed journals will be freely accessible.

EMBASE, the journal indexing database compiled by Elsevier Publishing in Amsterdam, indexes more than 4,000 journals, and previous investigations suggest that the overlap between EMBASE and MEDLINE is only 34%.[4] Thus using both databases will significantly improve the overall search coverage.[5] Of particular interest to podiatric medicine, EMBASE indexes *The Foot*, the "international journal of clinical foot science," which is not indexed in MEDLINE. Similarly, the Cumulative Index of Nursing and Allied Health Literature (CINAHL) indexes approximately 500 journals, with a particular focus on nonmedical allied-health journals that may be of considerable importance to podiatric medicine. Both *The Foot* and the *Australasian Journal of Podiatric Medicine* are indexed in CINAHL.

To illustrate the importance of multiple database searching, MEDLINE and CINAHL were used to search for articles relating to the search term "heel pain" published since 1985 (an arbitrarily chosen year within the range of dates covered by both of these databases). MEDLINE identified 153 articles and CINAHL 56 articles. Twenty-four of the articles identified through CINAHL were not included in MEDLINE, and these articles included both literature reviews and original research relating to the diagnosis and treatment of the condition. The source journals with articles relating to heel pain on CINAHL were from a range of disciplines, including medicine, nursing, chiropractic, and podiatric medicine. If a podiatric physician were to conduct a review of the literature pertaining to heel pain using only MEDLINE, a particularly comprehensive review,[6] a study of the use of diagnostic imaging in the treatment of plantar fasciitis,[7] and trials of acupuncture[8] and foot orthoses[9] for heel pain would not have been identified.

Clearly, then, researchers, educators, and clinicians in the field of podiatric medicine should consider conducting searches of numerous databases, in addition to MEDLINE, to ensure adequate coverage of the available literature.

HYLTON B. MENZ, BPod (Hons)
Division of Podiatry, Faculty of Health
University of Western Sydney–Macarthur
PO Box 555
Campbelltown, New South Wales 2560
Australia

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