

Teaching Critical Appraisal of the Literature: An Introduction to the JFP Journal Club

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Each year, over 400,000 articles are published in the approximately 8100 medical journals indexed by the National Library of Medicine. Even if one considers only family medicine journals and clinically oriented journals from other specialties, a family physician is still faced with dozens of journals and hundreds of articles per month. Making sense of this information overload is a daunting and potentially overwhelming task.

New ways of organizing and accessing information, such as the MEDLINE database that can be accessed either by modem or CD-ROM, have made it easier to search for and retrieve information. However, physicians without special research training may have difficulty interpreting the articles identified from such a search. Finding articles that contain information which should change the way we practice may be especially problematic. Many articles are written with the primary aim of communicating with other scientists, and translation of the results to clinical practice may be premature. Also, conclusions drawn from studies of patients referred to subspecialists or tertiary care centers often do not apply to patients in the family physician's office.

One successful approach to managing the medical literature is a "journal club," in which a group of physicians meet regularly to review several articles from the primary care literature. Articles are selected if they are especially noteworthy, if they have the potential to change the way we practice, or if they highlight an unusual or novel research method. Many residencies have successfully incorporated journal clubs into their curricula, and groups of physicians in private practice use journal clubs as a way to keep up with the latest medical information.

An important and related trend in medical education

and practice is called "evidence-based medicine." This approach has been adopted by a number of family practice residencies, and others are considering incorporating it into their curricula. In a nutshell, physicians who adopt an evidence-based approach become adept at using the medical literature to answer questions that arise in their practice.^{1,2} Further, they do not adopt a new procedure, medication, or technology unless there is sufficient evidence that it benefits patients. Clearly, the ability to critically appraise the literature and draw conclusions that help guide patient care is central to this approach.

This month, *The Journal of Family Practice* inaugurates a new feature entitled the JFP Journal Club. Each month, we will review two articles, one from the current issue of *The Journal* and one from another clinically oriented research journal. Each article will be reviewed and analyzed by a family physician with experience in research and critical appraisal of the literature. In addition to myself, five other reviewers will contribute to the series: John Hickner, MD, of Michigan State University in East Lansing; Warren Newton, MD, and Adam Goldstein, MD, of the University of North Carolina in Chapel Hill; Kendra Schwartz, MD, MSPH, of Wayne State University in Detroit, Michigan; and David Slawson, MD, of the University of Virginia in Charlottesville. This group brings a diverse range of interests and experience to the JFP Journal Club, and their input has been instrumental in developing its format. I am confident that you will find their reviews thought-provoking and helpful.

The JFP Journal Club feature will be of particular interest to physicians participating in a journal club, to those who are teaching or training in a program using an evidence-based approach, and to physicians who would like to improve their ability to critically appraise the medical literature. Of course, the JFP Journal Club will also help physicians keep up with advances in primary care, particularly those which have the potential to change the way we practice.

Each Journal Club feature is designed to facilitate an

Submitted February 7, 1994.

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ISSN 0094-3509

The Journal of Family Practice, Vol. 38, No. 5(May), 1994

evidence-based approach to critical appraisal of the literature. The background of the analyzed article will be briefly summarized and the clinical question(s) identified. The population studied in the article will be described, an important point since many studies take place in settings that do not reflect the practice of most family physicians. The study design is described next, along with comments regarding the validity of the design. The outcomes measured by the study are also noted: patient-centered outcomes such as mortality, quality of life, and duration or intensity of symptoms are generally more useful to the clinician and patient than purely biomedical measures. Finally, the results are described, and a recommendation for clinical practice is made.

This month's issue of *The Journal* also features the first in a series of articles by David Slawson, MD, Allen Shaughnessy PharmD, and Joshua Bennett, MD.³ These

articles will complement the JFP Journal Club by helping physicians learn to identify which articles should change the way they practice and to avoid those that do not provide useful information for primary care physicians.

We are confident that the JFP Journal Club feature will be useful to the readers of *The Journal*, and we welcome any comments or suggestions on how it can be improved in the future.

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