

Peer Reviewed Scientific Journals & the Scientific Review Process: Edited by Michael W. Easley, DDS, MPH; Jan 10, 2010.

What Does "Peer Reviewed" or "Refereed" Mean?

- Peer Review is a process that journals use to ensure the articles they publish represent the best scholarship currently available. When an article is submitted to a peer reviewed journal, the editors send it out to other scholars in the same field (the author's peers) to get their opinion on the quality of the scholarship, its relevance to the field, and its appropriateness for the journal.¹

What is a Peer Reviewed Journal?

- Many scholarly journals use a process of peer review prior to publishing an article, whereby other scholars in the author's field or specialty critically assess a draft of the article. Peer-reviewed journals (also called refereed journals) are scholarly journals that only publish articles that have passed through this review process. The review process helps ensure that the published articles reflect solid scholarship in their fields.²
- Publications that don't use peer review (Time, Cosmo, Salon) just rely on the judgment of the editors as to whether an article meets scientific rigor or not. That's why you can't count on them for solid, scientific scholarship.¹
- Note: This is an entirely different concept from "Review Articles."¹

What are Peer-Reviewed Journals versus Scholarly Journals?

- Scholarly journals contain articles written by, and addressed to, experts in a discipline.² They are concerned with academic study, especially research, and demonstrate the methods and concerns of scholars.² The main purpose of scholarly journal is to report original research or experimentation and to communicate this information to the rest of the scholarly world.² The language of scholarly journals reflects the discipline covered, as it assumes some knowledge or background on the part of the reader.² Scholarly journals always rigorously cite their sources in the form of footnotes or bibliographies.² Many scholarly journals are published by professional organizations.² While not all scholarly journals go through the peer-review process, it is usually safe to assume that a peer-reviewed journal is also scholarly.²

How do I know if a journal is peer reviewed?

- Usually, you can tell just by looking. A scholarly journal is visibly different from other magazines, but occasionally it can be hard to tell, or you just want to be extra-certain.¹
- One reliable source for checking whether an article from a journal has been peer reviewed or not is the National Library of Medicine at the National Institutes of Health (<http://www.nlm.nih.gov/>), generally non-peer reviewed articles or articles from non-peer reviewed journals are not listed.³ While most journals in PubMed are peer-reviewed or refereed (Non-editorial journal staff review original articles before the articles are accepted for publication), criteria for peer review and the qualifications of peers or referees vary among publishers.³ Unfortunately, PubMed, the search tool used by the National Library of Medicine, has no exclusive listing of peer-reviewed/refereed journals in PubMed; and one cannot limit their search to peer-reviewed journals using PubMed.³

An Example of a Peer Reviewed Journal's Author Guidelines & Instructions for Contributors from the *Journal of Public Health Dentistry*⁴

In order to illustrate the substantial requirements for an author to submit an article for review and approval to be published in a peer-reviewed journal, the Author Guidelines from the *Journal of Public Health Dentistry* are provided, as follows.⁴

- The *Journal of Public Health Dentistry* (JPHD) is devoted to the advancement of public health dentistry through the publication of related research, practice, and policy developments. We publish, after peer review and/or editorial consideration, original research articles, brief reports, systematic reviews, articles addressing new research methods, community action reports, special issues, guest editorials and commentaries, letters to the editor, and book reviews.⁴
- Regular-length scientific articles should be between 2,500 and 3,500 words in length, with no more than six tables or figures and fewer than 30 references (estimated to be a total of 21 or fewer double-space pages). Systematic reviews are similar in length but with different expectations regarding references and tables, based on the results of the review. Authors are strongly encouraged to discuss systematic reviews with the editor prior to initiating the review to ensure that they are carried out in accordance with best practices (e.g., QUORUM guidelines) and their length can be accommodated by the Journal.⁴

- Brief Communications are 1,000–1,500 words, no more than two tables or figures, an abstract of 150 words or less, and 10 or fewer references.⁴
- Brief Communications, commentaries, and systematic reviews undergo peer review similar to regular scientific manuscripts.⁴
- Community Action Reports, highlighting practice-based programs or policy initiatives, commentaries, and guest editorials of widespread interest to the dental public health community are 1,000–1,500 words.
- Special Issues and Supplements to regular issues may be published, the full cost being paid by the authors or sponsoring agency. Contact the editor for further information.⁴
- **Preparation of Manuscripts**
 - Submissions must be in English and conform to the Uniform Requirements for Manuscripts Submitted to Biomedical Journals. The complete document appears in *Ann Intern Med* 1997;126(1):36-47; or online at <http://www.acponline.org/journals/resource/unifreqr.htm>.⁴
 - Authors for whom English is a second language may choose to have their manuscript professionally edited before submission to improve the English. A list of independent suppliers of editing services can be found at www.blackwellpublishing.com/bauthor/english_language.asp. All services are paid for and arranged by the author, and use of one of these services does not guarantee acceptance or preference for publication.⁴
- **Submission of Manuscripts**
 - Manuscripts should be submitted through the ScholarOne Manuscripts site at: <http://mc.manuscriptcentral.com/jphd>. Authors will be directed through the submission process at the Website.⁴
 - Use double-spacing throughout, including title pages, abstract, text, acknowledgments, references. Begin each of the following sections on separate pages: title page, abstract and key words, text, acknowledgments, references, and individual tables and figures. Number pages consecutively in the upper right-hand corner of each page, beginning with the title page. Our reference book is *Merriam-Webster Collegiate Dictionary*, 11th edition (Springfield, MA: Merriam-Webster, 2003).⁴

- **Format and Style of Scientific Articles**

- **Title Page.** To facilitate the masked review process, include a title page giving only the title of the manuscript and not identifying authorship. Authors' names should not appear on any manuscript page.⁴
- **Abstract.** The second page should carry an abstract of no more than 250 words (150 for Brief Communications) consisting of four paragraphs, labeled **Objectives, Methods, Results, and Conclusions**. These sections should describe the problem being addressed in the study, how the study was performed, the salient results (without statistical tests), and what the authors conclude from the results.⁴
- **Key Words.** Below the abstract, provide, and identify as such, three to 10 key words or short phrases that will assist indexers in cross-indexing your article. At least three terms from the medical subject headings (MeSH) list of Index Medicus should be used. The use of MeSH headings greatly facilitates the identification of your article by online search engines and improves the likelihood that interested readers can retrieve your article. Assistance in locating MeSH headings is provided at:
<http://www.nlm.nih.gov/mesh/MBrowser.html>.⁴
- **Text.** Divide text of scientific articles into sections labeled Introduction, Methods, Results, and Discussion. For other types of articles, consult recent issues of the JPHD for further guidance. All acronyms must be spelled out when they first appear in the text.⁴
- **Introduction.** Clearly state the purpose of the article and summarize the rationale for the study. Give only strictly pertinent references, and do not review the subject extensively.⁴
- **Methods.** Describe your methods clearly and in sufficient detail to allow other workers to reproduce the results. Give references to established methods, including statistical methods; provide references and brief descriptions for methods that have been published but are not well known; describe new or substantially modified methods, give reasons for using them, and evaluate their limitations. When reporting investigations involving human subjects, indicate whether the procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation.⁴

- **Results.** Present results in logical sequence in the text, tables, and illustrations. Do not repeat in the text all the data in the tables or figures; rather emphasize or summarize only important observations.⁴
- **Discussion.** Emphasize the new and important aspects of the study and conclusions that follow from them, particularly as these relate to public health. Do not repeat in detail data given in the Results section. Include in the Discussion the implications of the findings and their limitations, and relate the observations to other relevant studies. Avoid unqualified statements and conclusions not well supported by your data. State new hypotheses when warranted, but clearly label them as such. Include recommendations when appropriate.⁴
- **Acknowledgments.** Acknowledge only persons who have made substantive contributions to the study. Obtain written permission from persons acknowledged by name, because readers may infer their endorsement of the data and conclusions. A description of sources of funding, financial disclosure, and the role of sponsors must be included in this section.⁴
- **Conflicts of Interest.** Include this section as part of Acknowledgements, but only if the authors have personal financial interests related to the subject matters discussed in the manuscript.⁴
- **Footnotes and Appendices.** Except in tables and figures, footnotes should not be used. Appendices may be placed on the JPHD website by Blackwell after consultation with the editor.⁴
- **References.** References for research manuscripts are in general limited to no more than 30; for brief communications please limit to ten or fewer. The author(s) must verify cited references against the original documents. JPHD uses the “Vancouver” style and information can be found at the Uniform Requirements page and well as some examples at (http://www.nlm.nih.gov/bsd/uniform_requirements.html). Identify references in text, tables, and legends by Arabic numerals in parentheses; number consecutively in the order in which they are first mentioned in the text. Avoid using abstracts as references. Abstracts not published in the periodical literature (e.g., printed only in an annual meeting program) may be cited only as written communications in parentheses in the text. “Unpublished observations” and “personal communications” may not be used as references, although references to written, not oral,

communications may be inserted (in parentheses) in the text. For papers accepted but not yet published; designate the journal and add “in press.” Information from manuscripts submitted but not yet accepted should be cited in the text as “unpublished observations” (in parentheses). Acceptable forms of references are based on an ANSI standard style adapted by the National Library of Medicine and authors are encouraged to refer to the examples of reference styles provided in the Uniform Requirements. Systematic reviews do not have a specific limitation on number of references.

Tables. Type each table on a separate page. Number tables with an Arabic numeral consecutively and supply a brief title for each. Explain in footnotes all nonstandard abbreviations used in each table. (Please refer to the JPHD, Volume 60, No. 4, page 347-8 to confirm these characters if you plan to use these symbols).

Illustrations and Legends. Submit the required number of complete sets of figures. Figures should be of a high standard and if necessary, professionally drawn. Label each figure indicating the number of the figure. Cite each figure in the text in consecutive order. Type or print out legends for illustrations using double spacing, starting on a separate page, with Arabic numerals corresponding to the illustrations. When symbols, arrows, numbers, or letters are used to identify parts of the illustrations, identify and explain each one clearly in the legend. Explain the internal scale and identify the method of staining in photomicrographs. The Journal cannot reproduce color images or figures.⁴

- **Publication**

- Prior and Duplicate Publication. Manuscripts are not accepted for consideration if they are based on work that has been or will be published or submitted elsewhere before appearing in the JPHD. Exceptions are consistent with the policy on duplicate or redundant publication developed by the International Committee of Medical Journal Editors *Ann Intern Med* 1997;126(1):36-47; or online at <http://www.acponline.org/journals/resource/unifregr.htm>. Copies of any closely related manuscripts should be submitted to the editor along with the manuscript that is to be considered by the JPHD.⁴

- **Authorship**

- All persons designated as authors should qualify for authorship. Each author should have participated sufficiently in the work to take public responsibility for the content. Authorship credit should be based only on substantial contributions to: (1) conception and design, or analysis and interpretation of the data; and to (2) drafting the article or revising it critically for important intellectual content;

and on (3) final approval of the version to be published. Conditions 1, 2, and 3 must all be met. The editor may ask for verification of these conditions for each author.⁴

- **Copyright Issues**

- JPHD encourages the posting of manuscripts resulting from NIH-funded research to PubMed Central (www.pubmedcentral.nih.gov) in order to promote public access to critical research findings. Authors whose manuscripts are accepted for publication in JPHD may post the final, edited version of the manuscript as soon as the printed journal version is distributed.⁴

- **Submission of Manuscripts and Correspondence**

- Manuscripts should be submitted through the ScholarOne Manuscripts site at: <http://mc.manuscriptcentral.com/jphd>. Follow the guidelines for submitting at the site.⁴
- Questions on manuscript submission, cover letters, and copyright assignments should be directed to the journal administrator at: cgordon@associationcentral.org.⁴
- Questions regarding the appropriateness of articles for the journal or questions about the review and acceptance process should be directed to the editor at: rjw1@dental.pitt.edu.⁴
- A covering letter, signed by all authors, should be mailed or FAXED (217-529-9120) to be received at the same time as the manuscript. A scanned copy of a signed letter, sent electronically as a PDF, is also acceptable. It should include (1) information on prior or duplicate publication or submission elsewhere of any part of the work as defined in the Uniform Requirements; (2) a statement of financial or other relationships that might lead to a conflict of interest; (3) a statement that the manuscript has been read and approved by all the authors, that the requirements for authorship have been met, and that each author believes that the manuscript represents honest work; and (4) the name, address, and telephone number of the corresponding author who is responsible for communicating with the other authors about revisions and final approval of the proofs. A scanned copy of the signed letter may be sent electronically or mailed to the journal administrator at above address.⁴

- **Manuscript Submitted Previously to Another Journal**
 - If a manuscript recently underwent peer review by another journal, authors should disclose this information. They should include either the previous critique or a cover letter with the new submission that explains how the authors have modified the manuscript to address the previous (outside) critique.⁴

- **Review and Action**
 - Manuscripts are acknowledged upon receipt, reviewed by the editorial staff, and if they meet minimal publication criteria, are sent to at least two outside referees for a blind review.
 - Accepted manuscripts are examined and editorial revisions likely will be made to add clarity and to conform to the JPHD style.
 - Authors will be sent proofs prior to printing. Upon acceptance, papers become the permanent property of the JPHD and may not be reproduced by any means, in whole or in part, without the written consent of the editor.⁴

- **Peer Reviewer Nominations**
 - The editor selects the reviewers for each submission and encourages recommendations for reviewers from submitting authors. Thus, during the submission process, authors may nominate 2 to 4 external referees to review their manuscript (please provide at least their name and email address). The best reviewers are authors of publications on which your research builds and which you cite. Peer reviewers must have a publishing track in the area with which the manuscript deals.⁴
 - When suggesting peer reviewers, conflicts of interests should be avoided, that is, suggested referees should not:⁴
 - be from the same department or (ideally) the same university; have been a research supervisor or graduate student of one of the authors within the past five years;⁴
 - have collaborated with one of the authors within the past five years or have plans to collaborate in the immediate future;⁴

- be employees of non-academic organizations with which one of the authors has collaborated within the past five years; or be in any other kind of potential conflict of interest situation (eg, personal, financial).⁴
 - We ask applicants not to contact suggested referees in advance. The editor reserves the right to send the manuscript to other referees.⁴
- **Reporting Guidelines for Specific Study Designs**
 - Authors are encouraged to consult best practice guidelines relevant for their research design. Research reports frequently omit important information.⁴
 - Randomized Controlled Clinical Trials (RCTs) are highly encouraged and should be reported in accordance with the CONSORT statement (<http://www.consort-statement.org/>). A diagram illustrating the flow of participants through the trial is required (<http://www.consort-statement.org/index.aspx?o=1077>). Please complete and include the CONSORT checklist with the submission.⁴
 - In accordance with recommendations from the ICMJE (Uniform Requirements) it is strongly recommended that RCTs be registered in a WHO accredited trial registry (this is mandatory for industry sponsored trials). Please mention the International Standard Randomized Controlled Trial Number (ISRCTN) (or a comparable trial identifier) at the end of the abstract (in brackets), as well as when you first mention the acronym of a RCT in the manuscript. Reporting guidelines have also been developed for a number of other study designs and as JPHD encourages reviewers to use these guidelines during the peer review process, authors are well advised to use these checklists as well during research planning and manuscript preparation. Examples include: for observational epidemiology studies the STROBE guidelines (<http://www.strobe-statement.org/>) and for meta-analysis and systematic reviews the QUORUM statement, (Lancet. 1999 Nov 27;354(9193):1896-900).⁴

- **Page Charges**

- Page charges: Current page charges are US \$150.00 for each page in excess of 7 printed journal pages (approximately 21 pages double-spaced typescript inclusive of figures, tables and references). Charges will be invoiced and payment is required prior to publication.⁴

- **Early View**

- The Journal is part of the Wiley Interscience Early View service. Articles are published on a regular basis online in advance of their appearance in a print issue. These articles are fully peer reviewed, edited, and complete—they only lack page numbers and volume/issue details—and are considered fully published from the date they first appear online. This date is shown with the article in the online table of contents. Because Early View articles are considered fully complete, please bear in mind that changes cannot be made to an article after the online publication date even if it is still yet to appear in print.⁴
- The articles are available as full text HTML or PDF and can be cited as references by using their Digital Object Identifier (DOI) numbers. For more information on DOIs, please see <http://www.doi.org/faq.html>.⁴
- To view all the articles currently available, please visit the journal homepage at <http://onlinelibrary.wiley.com/doi/10.1111/jphd.2008.9999.issue-9999/issuetoc>. Upon print publication, the article will be removed from the Early View area and will appear instead in the relevant online issue, complete with page numbers and volume/issue details. No other changes will be made.⁴
- The implementation of Early View for JPHD represents our commitment to publishing articles as soon as possible for readers, reducing time to publication considerably without sacrificing quality or completeness.⁴

- **NIH Policy**

- Wiley-Blackwell supports authors by posting the accepted version of articles by NIH grant-holders to PubMed Central. The accepted version is the version that incorporates all amendments made during peer review, but prior to the publisher's copy-editing and typesetting. This accepted version will be made publicly available 12 months after publication in the journal. The NIH mandate applies to all articles based on research that has been wholly or partially funded by the NIH and that are accepted for publication on or after April 7, 2008. For more information about the NIH's Public Access Policy, visit <http://publicaccess.nih.gov>.⁴
- Wiley-Blackwell also offers its OnlineOpen (www.blackwellpublishing.com/static/onlineopen.asp <http://www.blackwellpublishing.com/static/onlineopen.asp>) and Funded Access (<http://wileyonlinelibrary.com/onlineopen> <http://wileyonlinelibrary.com/onlineopen)>) services. Upon payment of the OnlineOpen or Funded Access fee, we will deposit the published version of the article into PubMed Central, with public availability in PubMed Central and on the journal's website immediately upon publication.⁴

- **Online Open**

- OnlineOpen is available to authors of primary research articles who wish to make their article available to non-subscribers on publication, or whose funding agency requires grantees to archive the final version of their article. With OnlineOpen, the author, the author's funding agency, or the author's institution pays a fee to ensure that the article is made available to non-subscribers upon publication via Wiley Online Library, as well as deposited in the funding agency's preferred archive. For the full list of terms and conditions, see http://wileyonlinelibrary.com/onlineopen#OnlineOpen_Terms.⁴
- Any authors wishing to send their paper OnlineOpen will be required to complete the payment form available from our website at: <https://onlinelibrary.wiley.com/onlineOpenOrder>.⁴

- Prior to acceptance there is no requirement to inform an Editorial Office that you intend to publish your paper OnlineOpen if you do not wish to. All OnlineOpen articles are treated in the same way as any other article. They go through the journal's standard peer-review process and will be accepted or rejected based on their own merit.⁴

References:

1. From University of Texas at Austin, Life Sciences Library.
2. CalPoly Library Services, Robert F. Kennedy Library, California State University.
3. National Library of Medicine, National Institutes of Health, PubMed (search engine).
4. Journal of Public Health Dentistry.