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Retracted articles impact nursing literature – Here’s how
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Evidence-based practice is defined in many different ways, but for nursing the term basically means delivering care that conforms to the "best available" information about what works and what does not work. Research from peer-reviewed, published, methodologically sound clinical trials is considered the "gold standard" although other evidence is also credible. We learn about individual studies from scholarly journals, yet the evidence from these individual studies can be conflicting. Despite these conflicting findings, our assumption is that the studies and analyses are based on truth. We assume that data were collected honestly and not fabricated; that figures or data are true and unadulterated; that conflicts of interest have not biased selection or reporting measures; and that what was discovered and presented can be used to help build the knowledge base for evidence-based practice.

What happens when the scientific record is not truthful? How do researchers or clinicians discover scientific misconduct and what does it mean when they do? Once scientific or publishing misconduct has been identified, the article in question must be retracted (see the guidance available on the website for the Committee on Publication Ethics at www.publicationethics.org ). Retracted articles are becoming an increasing problem in scholarly publishing and one that creates difficulties for authors, editors and reviewers alike. One study found that 235 retracted articles had been cited a total of 2034 times following their retraction; only a small percentage of those citations mentioned the retraction (Budd, Sievert, & Schults, 1998).

What is a retraction and what does it mean?
The most recent revision of the International Council of Medical Journal Editors (ICMJE) Uniform Requirements for Manuscripts (2008) states, "Authors are responsible for checking that none of the references cite retracted articles except in the context of referring to the retraction" (Section IV.A.9, p. 13). The latest guidelines for conducting systematic reviews for the Cochrane Collaboration (Higgins & Green, 2011) do not specifically address what to do with retracted articles discovered during the development of a systematic review. The Cochrane guidelines do address how to search for redundant publications and caution duplicate studies must be excluded from the analysis to prevent bias. A recent editorial (Vlassov & Groves, 2010) noted that five Cochrane Reviews in 2010 mentioned data fabrication, 2 mentioned data falsification, and one mentioned plagiarism as reasons for excluding primary studies from reviews. The purpose of systematic reviews, whether conducted by the Cochrane Collaboration or other groups or individuals, is to uncover and analyze all the research related to a specific topic in a systematic and unbiased way and derive from that analysis a general consensus about the state of the science. When this systematic approach fails to exclude retracted articles, the validity of the recommendations must be questioned.

The term "retraction" sounds as if the article has been removed from the scientific literature – that is
not the case. A retraction notice is placed in the journal that published the original article stating that the article has been withdrawn and describing the reason for the action. The original article will still be available in personal collections, libraries and electronic databases, thus, it falls to authors to determine if any articles in their reference lists have been retracted. The implication is that reviewers and editors should assure that references have been checked for retracted articles. This is not a simple task and the difficulty in finding retraction announcements may account for the fact that articles continue to accrue citations after they have been retracted. The primary repository for retracted articles is the National Library of Medicine where retraction statements are permanently linked to the retracted article. In Figure 1, a search for “retracted publications” produced a list and options for displaying that list can be seen in the pull down menu for “Display Settings.” The most useful feature is the “Sort by,” although it is still tedious to scan an alphabetical list of authors or journals to compare an entire reference list. It is clear, albeit not very easy, to see the words “Retraction in” that follows the original citation. A recent check of the entire list (http://www.ncbi.nlm.nih.gov/pubmed?term=retracted+publication+%5bpt%5d) revealed 1750 retractions sorted by most recent additions. There are other ways to find retractions, but a complete list that would facilitate comparison with an article’s reference list is not available.

What is the message for nurse authors, editors and reviewers?
There have not been a very large number of retractions of nursing articles; however, scholarly publishing in nursing must be vigilant and follow through when scientific or publishing misconduct is suspected. Nursing is not immune from such misconduct. The greater impact of the ICMJE guidelines could be the mandate to check reference lists of submitted or accepted manuscripts for retracted articles. The mechanism for doing so is not easy, but there are some things we can all do. At least editors should update their author guidelines to warn potential authors about including retracted articles in their references. Expert reviewers who have knowledge about any retracted studies related to an article they are reviewing should include that information in comments back to the author. Nurses who teach writing for publication, whether in universities or in continuing education courses, should be very familiar with publication ethics and reinforce the message about the importance of maintaining the integrity of the scientific record. All scholars share the burden of keeping science true and reliable, including the science of nursing.

References


Vlassov, V. & Groves, T. (2010, 8 Dec). The role of Cochrane Review authors in exposing research misconduct [editorial]. The Cochrane Library,
Center for Aging at the University of Texas El Paso School of Nursing and the Editor-in-Chief of the *Journal of the American Academy of Nurse Practitioners*. She is also the Editor of *Nurse Author & Editor*.