A Survey of Quotation Accuracy in Two Korean Dermatological Journals

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Background: The reference list is an important part of a scientific paper. To be useful it must be accurate.

Objective: The purpose of this study was to evaluate quotation accuracy in the Korean Journal of Dermatology and the Annals of Dermatology.

Methods: We randomly selected 35 references from Korean Journal of Dermatology and 35 references from Annals of Dermatology and checked them against the original articles.

Results: The overall rate of quotation error was 32.9%, respectively 40% in the Annals of Dermatology and 25.7% in the Korean Journal of Dermatology.

Conclusion: This study shows that the rate of quotation errors is unacceptably high in the Korean Journal of Dermatology and the Annals of Dermatology, which significantly diminishes the value of the information of its source. (Ann Dermatol 7(3):236–239, 1995)

Key Words: Annals of Dermatology, Korean Journal of Dermatology, Quotation errors.

Articles published in the medical literature are accompanied by a reference list. To be useful the reference list must be accurate. There are two types of reference inaccuracies: (1) When the information giving the identification of the source is incorrect (authors’ names, article title, journal name, etc.), this is an error of citation. (2) When the referenced statement does not reflect the content of its source, this is an error of quotation.

Concern has been expressed regarding the accuracy of references in medical journals. Most assessments have been limited to citations and have not included the accuracy of statements made about another author’s work.1,4 We present the results of a survey that looked at quotations.

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MATERIALS AND METHODS

All 1993 issues of the Korean Journal of Dermatology (KJD) and the Annals of Dermatology (AD) were chosen for review. For each selected issue, consecutive numbers were assigned to references from articles and short communications. Using a table of random numbers, references were selected until 35 references in KJD and 35 references in AD were obtained, giving a total of 70. References to non-journal items, such as books and book chapters, were excluded from analysis. Quotations were then verified by comparison with the original publication. If we did not own the source, we attempted to procure a copy of it through an interlibrary loan. A major quotation error was recorded if the content of the original article contradicted or did not support the authors’ contention. A minor quotation error was noted if the authors’ assertion, although inaccurate, preserved the meaning of the original article. We did not attempt to evaluate the truth of the statement or the relevance of the study design; we were only interested in the
accurate use of the quotation. When a reference was quoted more than once, all statements were checked. All errors were recorded but to calculate the overall error rates, no more than one quotation error per article was counted. When both a major and a minor error was present only the major error counted.

RESULTS

All quotations were located and verified against the original. Of the 70 references verified, we found 23 with at least one quotation error (Table 1), 15 (21.4%) of which were major errors. Because of the seriousness of quotation errors, several examples are given below.

Examples

Example 1
@ Error—The article by Kapp A is quoted to support an increased level of sIL-2R in a number of pathological conditions such as atopic dermatitis, psoriasis and lichen planus. But the article by Kapp A is about atopic dermatitis and psoriasis and contains absolutely no mention of lichen planus at all.

Example 2
@ Error—The article by Todes-Taylor is quoted to support the theory that there was no difference in total T cell, and T cell subsets in alopecia compared with the control. However the article by Todes-Taylor contains difference in T cell subsets in alopecia.

Example 3
@ Error—A typical trivial error was a quotation by the author who referred to "Kingman et al found no increase in internal malignancies in their 90 cases of keratoacanthoma" yet the original source had stated "Our study involved 90 patients with keratoacanthoma. Of that group, only 78 had adequate follow-up. Therefore, we were able to analyze the relationship of KA to internal malignant neoplasms in 78 patients."

Example 4
@ Error—The article by Gilbert is quoted to support bacteriologic cure rates in Staphylococcus

Table 1. Quotation errors in two Korean dermatological journals

<table>
<thead>
<tr>
<th></th>
<th>Major</th>
<th>Minor</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korean Journal of Dermatology</td>
<td>5</td>
<td>4</td>
<td>26</td>
</tr>
<tr>
<td>Annals of Dermatology</td>
<td>10</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>8</td>
<td>47</td>
</tr>
</tbody>
</table>
*aureus* of 95.2% in the fusidic acid treated group. The article by Gilbert showed 87% cure rates in the fusidic acid treated group.

**Example 5**


@ Error—The article by Wilkerson is quoted to support the theory that DPCP is non-mutagenic in Ames assay. But the article showed DPCP has been reported to be nonmutagenic on the basis of a limited Ames assay and in the photochemically activated Ames assay, the photochemically activated intermediate of DPCP may elicit a mutagenic response in UTH8413.

**Example 6**


@ Error—The article by Quan is quoted to support the theory that human papillomavirus appear to increase the occurrence of Bowen's disease in epidermodysplasia verruciformis(EV) and cutaneous squamous cell carcinoma. But there is no direct mention of the occurrence of Bowen's disease in EV

**DISCUSSION**

Our study is the first to examine the accuracy of reference quotation in the Korean Journal of Dermatology and the Annals of Dermatology. 32.9% rate of error is consistent with the findings of studies of the literature of other medical specialties. In a study of surgical journals, Evans JT* found a rate of quotation error of 29.2%(ranging from 21.7% to 44.4%). George and Robbins surveyed four major dermatologic journals: the Archives of Dermatology, the British Journal of Dermatology, the Journal of the American Academic Dermatology, and the Journal of Investigative Dermatology. The overall rate of quotation error was 35%. A survey by de Lacey et al of six medical journals yielded a total error rate of 15%(ranging from 12% to 20%).

Generally references in scientific journals can be separated into two parts: first, the citation and, second, the quotation. How important are errors of citation? A minor error that does not prevent the paper being traced may not result in too much inconvenience. Errors of omissions of volume number or year, however, often cause serious problems for readers and librarians who later try to retrieve references. Similarly omissions and careless transcriptions of authors' names may create bibliographical problems, and such anomalies often survive in published reports for many years. With the increasing availability of computerized medical data bases, it becomes more important to spell an authors' name correctly.

Quotation errors are even more important because they erroneously give credence to the authors' assertion. Indeed, in review articles references are the bases for the data. Errors of quotation cast doubt on the validity of the publication and the credibility of the authors. Several consequences result from misquotation: the original authors will be displeased that their findings or statements have been misrepresented; readers will, of course, be misled; and if a journal accepts a high level of inaccuracy in its published papers healthy circumspection by critical readers may quite properly lead to a more general disbelief. But perhaps the most serious consequence is the difficulty in correcting a major inaccuracy that may well become "accepted fact." We can only speculate about the reasons for the high rate of quotation errors. In some cases it appeared that the authors did not read the source, but merely copied the reference from another bibliography. Other authors affixed a reference—clearly relevant to the topic of the article—to a statement it did not support, possibly to justify its inclusion in the reference list.

Although a few quotation errors probably arise during the printing process, the responsibility for bibliographic accuracy has generally been assigned to the authors. The International Committee of Medical Journal Editors holds the authors responsible for
the accuracy of their references. However, the high rate of reference error suggests that author responsibility alone is not sufficient to ensure accurate references. Journal editors and reviewers need to share some of the responsibility. Checking all quotations would mean a huge amount of work for editorial staff. Nevertheless, editors should accept some responsibility for accuracy.

Whatever method of verification is used, reference accuracy is essential. An accurate citation allows the reader to retrieve the cited reference readily. An accurate quotation conveys faithfully the information of its source. Our survey documents that reference quotation errors are common in the Korean Journal of Dermatology and the Annals of Dermatology. Although authors are primarily responsible for providing accurate references, the responsibilities of peer reviewers should be clarified in this regard. We strongly urge that peer review of quotation accuracy be undertaken with much more care and vigour.

REFERENCES