Reviewer's report

Title: The Effect of Illustrations on Patient Comprehension of Medication Instruction Labels

Version: 1 Date: 2 March 2005

Reviewer: J. F. Arocha

Reviewer's report:

Summary: This paper presents an empirical study on the effect of illustrations on comprehension of medication labels by patients. Patients were presented 5 labels with instructions alone first, and later the same labels with the addition of an illustration. The authors asked the question of how much the patients' comprehension changed as a result of the illustrations. The study show inconsistent results, replicating previous research by McKnight.

General

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

I have two basic issues with the paper:

(1) The issue has been investigated in the past, with basically the same inconsistent results. The study of illustrations as an aid to comprehension has shown that illustrations seem to help in explanatory texts (for educational purposes) but that often, illustrations do not seem to help for other purposes. Medication labels is one of those areas. Obviously because illustrations vary a great deal (there a good and bad illustrations), the results, overall, are not surprising. It is not surprising either that the authors found that the labels used in their research were not very helpful.

I think that they missed an opportunity to get at some answers as to why the inconsistency on the research results by interviewing the study participants in detail and obtaining from them some verbal reports (given that interview seemed to be the primary data collection format). Is this information available from their data?

(2) The authors mentioned their method of data coding, which is based on the idea of "informational component," but fail to say what an informational component is (e.g., one informational component = one idea? If so, what is an idea?). How did they determine it? Also, they should explain what their method consists of. A suggestion would be for the authors to give an example of how they analyzed the verbatim data and how did they match the analysis of the data with their analysis of the "informational components" in the illustrations.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

(3) Other smaller issues/questions:
(a) Methods: It is customary to report the number of study participants in the methods section, not in the results section.
(b) Were the patients' responses tape-recorded? How were they registered? These questions should be answered.
Discretionary Revisions (which the author can choose to ignore)

**What next?**: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

**Level of interest**: An article whose findings are important to those with closely related research interests

**Quality of written English**: Acceptable

**Statistical review**: No

**Declaration of competing interests**: I declare that I have no competing interests