Reviewer's report

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

Version: 1 Date: 1 February 2005

Reviewer: Vimla Patel

Reviewer's report:

General
I enjoyed reading this paper. The topic is important and findings are relevant for design of instructions. It is a small, but carefully carried out study. The authors have given a good deal of thought to the analysis of the data using statistical analysis and the conclusions are drawn cautiously.

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

I was disappointed to see that such an interesting and important study was atheoretical. There was no theory to guide this study and this of course led to authors' inability to generate any hypotheses. There is a well defined theoretical framework for comprehension in the literature and I am sorry to note that the authors did not use this literature. The papers cited are limited to only the practically-oriented studies. The authors have shortchanged themselves by not looking beyond to educational and psychological journals for theoretically driven scientific support for their study. Use of illustrations to support text information is well documented in literature. In fact, the Journal called “Instructional Design” has number of such papers (For Example: Patel, V.L., Eisemon, T.O. & Arocha, J.F. (1990) Comprehending instructions for using pharmaceutical products in rural Kenya. Instructional Science, 19, 71-84.). Although this is one such paper, there are many others published more recently. The authors may wish to look this up.

Not having a sound theory to help the authors generate good hypotheses also meant that they were too narrow in their interpretation of results and this could be misleading people to believe that pictures are not necessary. Literature has shown that illustrations are usually much better for comprehension of medication labels, as long as these illustrations match the educational and cultural background of the users. Having both the text and the pictures means that it gives the people option of representing the information in more than one way. But there should be a good match between the picture and the text.

It is also unfortunate that more time was spent on careful analysis of quantitative data rather than looking at the meaning of data collected. For example, it is interesting why people focus on pictures under situation of complexity? I would like to see more interpretation of the quality of information rather than the quantity alone. The authors may wish to take a look at more recent paper on this aspect, which also shows how a good theory is important for even practical research.


Summary: Important paper, carefully carried out study and it could be published if it is modified to include some theoretical framework and the findings are interpreted taking into account other studies on pharmaceutical labels.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
None

Discretionary Revisions (which the author can choose to ignore)

None

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

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No

**Declaration of competing interests:**

I declare that I have no competing interests