

Mr. SCHERAGO. Yes sir, every article of scientific content.

Senator NELSON. Is peer reviewed in the fashion you are talking about here?

Mr. SCHERAGO. Yes, sir.

Senator NELSON. That is true of all of the scientific journals that you are familiar with?

Mr. SCHERAGO. That we are involved with, yes; all of those that I am familiar with, yes.

Senator NELSON. Which ones are you involved with?

Mr. SCHERAGO. "Science;" "Clinical Chemistry;" "The American Journal of Medical Technology;" "Pathologist;" and "The Journal of Family Practice."

Senator NELSON. To your knowledge, the other scientific journals that you are not involved with use the same procedure?

Mr. SCHERAGO. Yes, sir. That is correct.

Senator NELSON. And are peer reviewed by at least two independent knowledgeable scientists in the field involved?

Mr. SCHERAGO. Correct.

Senator NELSON. Go ahead.

Mr. GORDON. May I ask a question at this point?

Senator NELSON. Yes.

Mr. GORDON. What about the "Journal of the American Medical Association?"

Is that supposed to be peer reviewed?

Mr. SCHERAGO. I could not say, sir. You would have to check with them. I am not aware of what procedures they use.

Mr. GORDON. I recall several years ago the AMA Journal had an article by Dr. Varley, who was the medical director of the Upjohn Co. in which he claimed that generic tolbutamide (Orinase being the trade name), does not have the same bioavailability as the trade name product manufactured by the Upjohn Co.

Well, the Upjohn Co. had an exclusive license from the patentee, a German firm, and there was no generic product on the market; the so-called generic product having been fabricated in the laboratories of the Upjohn Co. That was a lead article.

So, I am just wondering! It does not seem possible that any independent people had reviewed that article.

Mr. SCHERAGO. I cannot say. I am not familiar with their operation.

In its simplest form, this doctrine of peer review says that no piece of scientific research can be considered valid unless it has been reviewed by at least two recognized authorities in the field of science involved. Through the years scientists have tenaciously stuck to the peer review system of journal editing.

At this time I would like to turn the witness chair over to Mr. Ringle, who will give you some idea as to how "Science" magazine handles the peer review process.

Senator NELSON. Did you give your full name and identification to the reporter? She has that? Good.

Mr. RINGLE. Mr. Chairman, I will describe the peer review system at "Science."

Most scientific journals use some system similar to this. Most scientific journals are reviewed, as are all of the journals published