

“A Plea for Pity in Publishing Percentages” is the eye-catching title of a communication by Dr. S. E. Ross, of San Francisco, which appeared in the Correspondence section of the April 9th issue of the *J.A.M.A.* With us the title fulfilled its intended purpose; the letter itself appealed to us to the point that some of it is used here, with permission.

“To know is to foresee and to write is to teach. To give percentages in a medical paper is to do all of these.

“When one reads that [of an author’s] ‘patients with carcinoma of the pancreas 6.3% exhibited bone metastases’ one expects 6.3% of the next 100 patients with carcinoma of the pancreas to exhibit the same phenomenon; this is what the author must have meant. [Although the number of his patients was only 16] he knows what will happen to the next 100 (this is what the term per centum implies; it is a forecast), and he goes out of his way to save his reader the trouble of figuring. The reader is actually being uncooperative by doing the calculations again to find that 6.3% of 16 patients is one patient.

“The author may want to help the reader make comparisons [who says] that the x-ray examination was correct in 60% of five patients with polyposis of the stomach, and the gastroscopic examination in the same group was correct in 80% of five patients, and that x-ray examination was conclusive, however, in only 22.2% of nine patients who, at operation, did not reveal any lesions in the stomach. Obviously 60% and 80% appear more meaningful than three of five and four of five; certainly 60% and 22.2% can be more easily compared than three of five and two of nine. They differ by 37.8%—or is it 270.27%? (How does one properly compare percentages? Does one subtract them? Does one divide them? If so, which one into which one?)”

The author of this letter, after another example or two of attempts at “finding facts among flowery figures,” tells what he would say to his son if he (the son) should ask for a suggestion before writing a medical paper. After warning him “about asking for advice and getting some that is hard to refuse and not easy to use,” he would say:

“Always give the absolute figures when you mention percentages. Do not worry about being redundant. For instance: Forty-one of the 115 patients were living and 74 were dead. . . . There were 20 (17.3%) who died of exsanguination, 31 (26.9%) who died of hepatic failure, and 23 (20.0%) whose death was due to unrelated causes.

“If he should insist on just one more suggestion, I should add: ‘In clinical articles avoid giving fractions of 1%. They clutter your paper; they make your figures harder to grasp and harder to remember; they tend to reflect pedantry rather than precision; and they cannot matter.’”

We applaud the writer’s point of view. Particularly does the last item appeal to us, the one about the pedantry of the pseudo- or false accuracy. The writer’s point is illustrated in the last figures quoted. To use the mentally obstructive “precision” figures 17.3% and 26.9% instead of the simpler 17% and 27% is quite useless in such circumstances, the fractions without significance.

This pseudo-accuracy is sometimes a source of wry entertainment in looking over official reports. Consider first how frequently the primary causes of deaths given in death certificates are erroneous, and then observe that the frequency rates of the official mortality statistics are carried out to the second decimal point—because the figures come out that way on the calculating machine, not because they mean anything.

Writers in THE JOURNAL do not use their statistics *that way*. In fact, the tendency is rather to avoid giving decimal fractions at all. The purpose of this note is, in part, to encourage that tendency.

—H. W. W.