A radomized controlled trial of prayer?

Does, A.J.W. van der

A Randomized, Controlled Trial of Prayer?

Extraordinary claims require extraordinary evidence. However, is the evidence sufficient for the claim by Harris et al[1] that prayer may be an effective adjunct to standard medical care? Patients in the coronary care unit (CCU) who were randomized to receive remote, intercessory prayer (plus usual care) stayed as long in the CCU and in the hospital as patients who received usual care only. Furthermore, there were no differences between groups on 34 clinical outcome characteristics, but the prayer group had 11% lower scores on a new, unvalidated summary statistic describing clinical CCU course. The only alternative explanation that the authors discuss is chance, which they consider unlikely given one statistically significant (*P*=.04) difference between groups. The authors do not realize, however, that by making 34 comparisons using separate *t* tests with α set at .005 and another 3 with α set at .05, the chance of finding 1 significant difference is not 1 out of 25, but

$$1-(1-0.05)^3 + 1-(1-0.005)^{34} = 0.14 + 0.16 = 0.30,$$

almost 1 out of 3.[2] Furthermore, with groups of more than 400, the smallest differences become statistically significant.

Finally, the authors fail to consider further alternative explanations for their findings. Consider the following: As a clairvoyant and telepath, I was aware (unlike the patients in the CCU and the staff involved) that this study was going on. Wanting to take advantage of the careful registration of CCU courses, I have subsequently used my telepathic powers to influence the CCU course of the experimental group. Admittedly, the effect was a little weaker than I anticipated, but that should be attributed to the fact that this was my first transatlantic telepathy work. My influence has worked quite satisfactorily in a recent European trial that some people think was investigating a new analgesic. I wonder whether Harris et al have convincing arguments favoring their interpretation of their data over mine. They might point to the fact that more people believe in prayer than in my clairvoyant and telepathic powers. There were times, however, that everyone believed that the earth was flat, and everyone was wrong. Which will it be in this study—prayer, telepathy, or a summary statistic of uncertain validity? I am willing to reveal that I will settle for chance.

Willem Van der Does, PhD
Leiden, the Netherlands

REFERENCES

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