

sulted from a study design which attempted to duplicate as closely as possible the management of the ambulatory diabetic patient prevailing when the program started. At that time, no means were available to achieve ideal, that is continuous, physiological blood sugar homeostasis in the ambulatory patient. Thus the UGDP results apply only to the less-than-optimal control attainable under the design of the program. In recent years much progress has been made to develop means by which a more nearly ideal control may become possible and can be placed into the hands of the practitioner. If it is found in the future that such ideal control has better effects than those observed in the UGDP, the investigators will gladly acclaim this progress and will be satisfied that the UGDP controversy has accelerated this step forward in the care of the diabetic. After all it is not only the CCD who cares!

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Although I have admired Kolata's reporting in the past, her article on the UGDP is marred by incomplete and one-sided presentation of several key points. Among the many issues which call for comment, let me mention three.

Kolata formulates the controversy as a battle between those who "sharply attack" the findings of the UGDP on the one side, and those who "evangelically promoted" it on the other. She fails to point to the far larger group who share the view that the findings of the UGDP are not in themselves decisive, but that they raise a legitimate concern about the oral drugs tested. That concern cannot be resolved by further debate about the UGDP alone, but only by assessment of it along with other evidence, or by further clinical study. On these matters the review is silent.

Kolata describes the UGDP as "one of the first large-scale trials ever conducted" and says that "it served as a model for the large crop of clinical studies that followed it." These remarkable statements ignore the long history of clinical trials, both here and abroad. If a beginning date for "large-scale" clinical trials must be found, it would be at least 10 years before the start of the UGDP, when the Veterans Administration initiated its ongoing program of clinical trials, among which the trial demonstrating the effectiveness of streptomycin in treating certain types of pulmonary tuberculosis is perhaps preeminent. Nor should the contemporaneous British studies and the celebrated field trial of the Salk polio-

myelitis vaccine in 1954 be overlooked. The UGDP is a model for later trials only in the sense that those who plan new trials strive to improve on those of the past. However, it is no more of a model than are those mentioned above and the host of additional trials conducted over the last 20 years.

Kolata quotes me as pointing to the unusually complete reporting of detail as a source of some of the criticism of the UGDP, and she goes on to infer from my remark that all or most clinical trials collect data of inferior quality. I am, no doubt, at fault for failing to emphasize to her that my remarks apply to *all* scientific experiments, and not just to clinical trials. When a great many variables are measured simultaneously in a comparative experiment, it is nearly certain that, as a matter of chance, some variables will appear to favor one group over another. Were it the general custom to publish experimental data in so much detail, the scope of criticism—both valid and misguided—would be virtually unlimited. If my comment is seen as a basis for such criticism, the target will have to be the whole of experimental science, not just clinical trials.

In sum, the issues surrounding almost any public policy decision are difficult and often controversial. There is room for strong differences of opinion in the present instance, and that should cause neither surprise nor alarm.

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Misplaced Nuclear Plant

Luther J. Carter's briefing "Nuclear reactors and eastern earthquakes" (News and Comment, 30 Mar., p. 1320) is accompanied by a map that, because of its inaccurate location of the James A. Fitzpatrick nuclear power plant, owned by the Power Authority of the State of New York (PASNY), may cause undue consternation to the citizens of western New York.

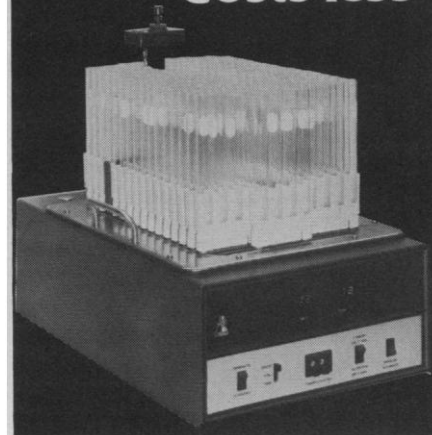
The map shows the PASNY reactor near Buffalo at the eastern end of Lake Erie, an area having historical and instrumentally recorded seismicity, whereas the reactor is actually situated near Oswego, at the eastern end of Lake Ontario, in a region of relative seismic quiescence.

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