

(61) Sheila M Gore (1982)

Statistics in Question: Assessing Clinical Trials

In Statistics in Practice

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Preamble

This volume comprises two series of articles originally published in the *British Medical Journal*. The first series of eight articles titled, *Statistics and Ethics in Medical Research* (24 pages), was written by Douglas G Altman BSc (Medical statistician, Division of Computing and Statistics, Clinical Research Centre, Harrow, Middlesex, UK); the second series of articles occupies pages 25 to 96 and is the one referred to here. The preface is by Stephen Lock, Editor of the *British Medical Journal*.

Aims

If for medical journals the 1960s and 1970s seem likely to be remembered as the era when the importance of ethics was emphasised, the last 20 years of this century promise to be that of statistics. Not that the two are totally separate; bad statistics is bad ethics. Yet poorly designed and analysed trials are still done – and published – and, whatever the subsequent criticism, erroneous conclusions may become enshrined as the truth. To remedy this state of affairs needs action by three groups: researchers / authors, medical statisticians, and editors of journals and their advisers. The first need to be reminded that they need statistical advice before starting a project and not at its end. The second should appreciate that most doctors are still bewildered by statistical jargon and too often react by ignoring the more important aspects of logic and correctness of argument. Thirdly, editors should be on the lookout for pitfalls and use expert statistical advisers more frequently than they do. Above all, however, their role should be as educators by reiterating the principles of statistics, telling authors where they have gone wrong, and teaching readers how to avoid mistakes. The articles collected here, will help those embarking on a study that will need statistics – and only a foolish researcher would start a study without thinking carefully about the statistical principles. It will also help doctors to understand and assess the results of clinical trials: some statistical understanding is a vital tool in safe and intelligent prescribing (Preface).

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