



The ISI Declaration on Professional Ethics: Academic experiences of the value of formal professional ethics

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Statistics is essential for many professions if their members are to practice ethically, through making well-founded decisions. Professionals need to understand what the risks and benefits of their actions, such as prescribing a drug, or imposing a prison sentence, are likely to be. Statistics has a role in detecting fraud or misconduct, in commerce, government and research. I recognised this aspect of statistics after I began collaborating in medical research and teaching in 1986. I sought out guidance on ethics from Statistical Societies. Both the Royal Statistical Society (RSS) and the American Statistical Association had short codes. However, the ISI Declaration on Professional Ethics provided far more background and encouragement to me to think through the wider implications of my statistical career. It is also useful to compare Codes of Ethics from different disciplines.

Consent to be studied is an important consideration, but uninformed refusal to participate in studies has personal and social disadvantages. I explore consent in the context of cluster randomised designs, medical studies carried out in different countries, and as part of arguments that there are ethical advantages favouring Bayesian statistics.

Our Professional Ethics codes are important when statisticians act as expert witnesses in various legal cases - or are not instructed! The RSS council commented critically on the role of statistical errors in the conviction of a mother for the murder of her two children. This contributed to the re-evaluation of several murder convictions. A high value case regarding adverse events of a pain-killer, VIOXX, provided me with experience of different attitudes to telling the truth, trying to find the whole truth and communicating uncertainty. A different challenge arose in the case of three doctors who were accused of gross professional misconduct with regard to a randomised controlled trial of methods of assisting breathing in very premature infants. A medical ethicist who supported the parents who raised the case recommended that the prosecuting body instruct a statistician, as statisticians had already written in support of the three doctors. As a result of my report, the hearing began by the prosecution withdrawing nine of the ten charges. The remaining charge related to the claim by the doctors that they were entitled to say that a child was better off dead than alive. In response to the attempt by one barrister (advocate) to discredit my professional competence, I referred explicitly to statistical codes of ethics.

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