

NOTES & RECORDS — OF — THE ROYAL SOCIETY

Trial By Media

Robin W. Carrell

Notes Rec. R. Soc. published online June 20, 2012
doi: 10.1098/rsnr.2012.0028

P<P

Published online June 20, 2012 in advance of the print journal.

Email alerting service

Receive free email alerts when new articles cite this article - sign up in the box at the top right-hand corner of the article or click [here](#)

Advance online articles have been peer reviewed and accepted for publication but have not yet appeared in the paper journal (edited, typeset versions may be posted when available prior to final publication). Advance online articles are citable and establish publication priority; they are indexed by PubMed from initial publication. Citations to Advance online articles must include the digital object identifier (DOIs) and date of initial publication.

To subscribe to *Notes Rec. R. Soc.* go to: <http://rsnr.royalsocietypublishing.org/subscriptions>

ESSAY REVIEW
TRIAL BY MEDIA

by

ROBIN W. CARRELL*

Trinity College, University of Cambridge, Cambridge CB2 1TQ, UK

Linda Bryder, *Women's bodies and medical science: an inquiry into cervical cancer*.
Palgrave Macmillan, Basingstoke, 2010. Pp. vi + 250. £60 (hardback).
ISBN 978-0-230-2603-5.

If a professor . . . neglects research, lets controversy rest, He's but a petty tradesman
at best. Kālidāsa (Sanskrit poet, ca. fifth century A.D.)

The incorporation of advances in medical science into clinical practice is led by the great teaching hospitals of the world. Not only are these found in the predictable clusters of Boston, London and Paris but they are also dotted in unexpected places throughout the globe. New Zealand had one such centre of excellence, the National Women's Hospital in Auckland. It was an acknowledged international leader in the medical care of mother and newborn, the specialties known as obstetrics and gynaecology. Its reputation was built on the quality of its teaching and patient care together with the constant research and questioning that is the mark of a teaching hospital. The index of its greatness comes from the way in which this openness to new ideas led to two outstanding medical advances: the introduction of intrauterine blood transfusion by William Liley and the demonstration by Mont Liggins that corticosteroids promoted the maturation of the lungs in the developing fetus. Together these two discoveries by clinicians at the National Women's Hospital have saved the lives of many thousands of newborns. The contributions of Liley and Liggins were recognized by distinguished awards, and both were elected FRSNZ, with Liggins subsequently also being elected FRS. The Women's Hospital became a source of national pride, a beacon for young medical graduates in New Zealand, showing what could be achieved within its shores. Yet in 1987, within a matter of months, a catastrophe struck that ended up destroying the hospital, dishonouring its staff, and in the longer term undermining academic medicine as a whole in New Zealand.

Linda Bryder tells in a scholarly and definitive way the story of how this calamity came about. It is a chilling and gripping account. Read it. Although the story relates to a crisis in New Zealand, it bears a grim message for all who endeavour to advance medical science. The societies we live in are not always rational. Bryder records in referenced sequence the events that built up to the implosion of 1987. This arose from what is one of the most contentious issues in medical practice—the assessment of the use of screening procedures

*rcw1000@cam.ac.uk

for the detection of cancer. The underlying dilemmas are seen in the current questioning of the long-established programmes to detect breast cancer, as well as with the more recently proposed screening tests for cancer of the prostate and for bladder tumours. There is a double quandary: the detection systems used merely give an indication and not a certainty of the presence of a cancerous change, and there is now an increasing awareness that even if confirmed such changes can regress or grow so slowly as not to threaten the well-being of the individual. Yet once a screening programme is established it becomes difficult to question it. Epidemiologists and Health Authorities love the statistics '40 000 screened and 200 cancers prevented'. It seems churlish to raise the possibility that a significant proportion of the 200 who have had radical surgery and are rejoicing in a clean bill of health might not, after all, have had a life-threatening tumour. The lesson is that before instituting a mass screening programme there need to be careful and documented studies of the significance and reliability of the screening procedure and of the natural history of the progression of detected lesions. It was the institution of such studies and the asking of these questions that led to the downfall of the National Women's Hospital in 1987. The studies began in the 1960s and centred on the newly introduced screening test for cervical cancer, the Papanicolaou smear.

The changes in the microscopic appearance of cells present in a scraped smear provide a powerful method for the early detection of one of the most common tumours in women, cancer of the cervix of the uterus. There was agreement by all that the detection of cancer by this method should be promptly followed by surgical removal, usually involving the excision of the whole uterus—hysterectomy. The questions arose from the much more frequent identification in the smears of cellular changes indicating a precancerous state, collectively labelled carcinoma *in situ*. How many of the carcinomas *in situ* progress to malignancy? How many will regress to give subsequent normal smears? If the carcinoma *in situ* is followed by repeated examinations, is it feasible to detect the focal development of malignant changes? Can this be achieved early enough to allow a local excision that does not mar the future of a young woman? These were the questions addressed by an academic clinician at the National Women's Hospital, Herbert Green. He set up a proper and recorded study to follow by repeated examinations the changes in cervical cytology in individual patients, with surgical intervention if malignant changes became evident. To do this he became expert in the interpretation of the cellular changes in cervical smears under the tutelage of a specialist cytopathologist. This commendable study needed to be done, and Auckland as a centre of excellence in academic obstetrics was a place where it should be done. There was international recognition of the study. Liley quoted in 1975 the comment of a distinguished US expert in the field: 'I think Green's work on the natural history of carcinoma *in situ* is just as important as your [Liley's] work on haemolytic disease or Liggins's work on fetal endocrinology. He has saved a lot of young women from mutilating surgery.' This was praise indeed, but it was not universal.

For anyone who has worked in a major teaching hospital Bryder's account captures a familiar milieu. In the best of circumstances there is a seamless merging of academic and service medicine, but even so there are underlying tensions. The academics question and innovate; the health service doctors just get on with it and practise in the hospital and in their private clinics the medicine they were taught in their first postgraduate years. In the worst case there is a resentment of the perceived ivory-tower existence of the professors and a resistance to change and to new ideas. Such tensions surfaced in Auckland with the appointment of a new histopathologist who clearly resented Green's independent

assessment of cervical smears. He joined with a gynaecologist in writing a critical review of the management of carcinoma *in situ* in the Women's Hospital with particular regard to the outcome of Green's study. The review was a retrospective account in 1984 of procedures set in motion nearly 20 years beforehand. The field in general and procedures in Auckland had changed in the interim, but nevertheless it was right that such a review should take place. Unfortunately the authors presented their findings in a way that was consistently misinterpreted. Their division of the patients into two groups with very different outcomes was made on the basis of the cervical cytology, whereas it was repeatedly presented to the public in subsequent proceedings as a callous division into treated and untreated cohorts. It was to no avail that Green's colleagues, including Liggins, later protested, 'the charges against Herb Green that he divided the patients into 2 groups and treated them differently, was then, and still is, entirely false.'

Green faced further opposition arising from his view at the start of his study that carcinoma *in situ* might regress, and hence he was sceptical of the benefits of a mass cervical screening programme. This put him at odds with public health epidemiologists in the other and older medical school in the south of New Zealand. They were commendably advocating the introduction of mass screening, but this commendation carries with it the obligation that there should also have been at least an encouragement to perform accompanying studies to check the assumptions on which the screening programme is based. Such clinical studies are the most arduous and least applauded of all forms of medical research. They require, as Liley said in praise of Green's work, 'dogged long-term data collection'. It was the right of the epidemiologists to criticize the assumptions and procedures of Green's study, but for an academic to describe in 1986 such a careful and open clinical study as 'an unfortunate experiment' was ill-considered. It was these three words, whether taken out of context or not, that fed the irrationality that went on to cripple academic medicine in New Zealand. The label 'unfortunate experiment' was readily linked in the media and the public mind to 'Auschwitz'.

The women's movement in New Zealand has a proud record. In 1893 New Zealand was the first independent country to grant the franchise to women, an advance preceded in 1877 by its being the first country in the British Empire to grant a woman a BA degree and then in 1891, much to its credit, petitioning the University of Cambridge to award degrees to women! But years later, in the 1970s, as Bryder describes, a more aggressive anti-male stance developed, with the new women's health movement proclaiming its intent 'to attack medical authority and reclaim women's bodies and autonomy over their lives'. Strident attacks were made on the medical staff of the National Women's Hospital: on Professor Liley and Professor Green for their attitude to abortion, on the head of the Department of Obstetrics, Professor Bonham, for his support for hospitalized births, and eventually on Liggins for his research on hormone contraceptives. The vehemence of the two leading feminists climaxed with the publication in 1987 in a national magazine of an article entitled 'An unfortunate experiment at National Women's'. This set the scene with a damning misinterpretation of the 1984 review of Green's work and the implication that the academics of the National Womens Hospital had callously allowed patients to develop cancers of the cervix as part of an 'unfortunate experiment'. The response was a national uproar of indignation. Wisdom and insight at this stage should have immediately questioned this repugnant charge. The greatest of all courts is that of common sense. The list of professors at the Women's Hospital reads like a roll of honour—Liley, Liggins, Bonham, Green, Seddon—these were all people of exceptional

and proven ability. It goes against common sense that these would together take part in, or be bystanders to, dubious—let alone unethical—practices. There was of course one almost inevitable truth: all the professors were male and all the patients with changes in cervical cytology were female.

The timing of the feminists' article coincided with a new government's taking power with a feminine agenda. The Minister of Women's Affairs was the niece of the disgruntled pathologist who authored the 1984 review, and the militant feminists were allowed direct access to the government at all levels. Once the political decision was made to hold a formal Inquiry, these militants were consulted before the appointment of a female judge to head the Inquiry, and their closeness to influence was evident on the day that the Inquiry issued its report, when they shared a champagne celebration with the Minister of Health in his office. Even more inappropriately, and in breach of natural justice, the government took advice from the senior epidemiologist who led the opposition to the Auckland study and appointed a member of his department to the key post, as the judge's technical advisor. Both Green and Bonham approached the Inquiry naively confident in their record and unaware that what would start as an inquiry would degenerate into an inquisition. From Bryder's account, the judge, Silvia Cartwright, did try to maintain fairness and keep the proceedings in the format of an inquiry. However the combination of an aggressive advocate for the feminists, together with the accompanying press furore, turned the process into an adversarial trial. Disgracefully, Herbert Green, at the age of 71 years, ill, and after a lifetime of distinguished medical service, was publicly humiliated and Professor Bonham was harassed. Contrary to the feminist and press clamour, both were caring and thoughtful clinicians, but the feminists' counsel disparagingly dismissed as 'fan mail' the many letters of support from their patients. The predictably devastating final report of the Inquiry is dissected by Linda Bryder, and the doyen of the field, Sir Iain Chalmers, has from Oxford issued in the *New Zealand Medical Journal* an unanswered challenge to the central point of the report's findings. In the words of Mont (Sir Graham) Liggins FRS:

the famous 1984 article...on which the Metro article which stimulated the cervical cancer enquiry was based, was misinterpreted by the authors of the Metro article and by the judge. Once rolling, such minor matters became irrelevant to the course of the juridical inquiry which allowed its brief to encompass every possible area of medical practice about which there was public concern.

Liggins's conclusion was simply that there was no unfortunate experiment at National Women's. But that was beside the point; the Inquiry had become a Trial By Media.

The merit of the Inquiry can be judged from its outcome, a mixture of farce and tragedy. The report was received with an extraordinary wave of media approbation and public applause. The prosecutors became instant celebrities. Weirdly, the judge, Silvia Cartwright, appeared in the company of the militant feminists at a victory celebration and in doing so immediately placed her objectivity in question. Her career nevertheless accelerated from district to high court judge and then in nearly a decade to Governor General of New Zealand. No doubt this was justifiable in her own right, as certainly was the advancement of the senior epidemiologist to be Vice-Chancellor of the southern university. But compare and contrast that with the fate of the academics whose lifetimes of work had built in New Zealand a world-acclaimed medical centre for women. Liley was by this time dead, and Green in retirement was universally denigrated. Liggins was scarred. The feminists arrogant

in their victory had pressured Bonham, the head of the Women's Hospital, into retirement, and then cowed the University of Auckland into denying him emeritus status. But worse was yet to come.

How does an enlightened nation descend into irrationality and allow witch-hunts to destroy the lives of decent people? This reviewer remembers being in the Paris office of a prosecuting magistrate in the 1990s, at the time of the persecution in France of blood transfusionists. A Cambridge professor faced imprisonment and the magistrate had narrowed the accusations against him to just seven patients. One by one we went through their folders and one by one she conceded each to be baseless or irrelevant. In the end there was no case. When asked why then was she going ahead with the prosecution she answered wearily, hands outstretched and looking beyond the room, 'But you do not understand. There is such anger out there.' Similarly in New Zealand a senior medical authority, when challenged on the way in which Professor Green and Professor Bonham were treated, replied, 'public opinion would accept no other outcome'!

When irrationality overwhelms any society it reveals the existence of a sizeable group of people, often in posts of influence, who sense and respond to the public mood. They are called different names in different countries—placemen, apparatchiks, or in Britain safe pairs of hands. So it was in New Zealand. In actions that seem beyond belief, another tribunal found not only Professor Bonham but each of the remaining members of the ethics committee of the National Women's Hospital at the time of Green's research, 20 years previously, including Professor Seddon, guilty of conduct unbecoming of a medical practitioner. Professor Bonham in his role as head of the Postgraduate School of Obstetrics and Gynaecology was additionally found guilty of disgraceful conduct. All were fined. Their medical careers and standing were effectively ruined. It was indeed a witch-hunt. Some of the leaders in medicine in New Zealand spoke out on Bonham's behalf, but in the prevailing mood it took courage to do so. A national magazine that exceptionally did question the Cartwright Report and its aftermath met the full force of the feminist zealots including an intimidating threat to write to the publishers of the magazine and separately to each of its 24 advertisers. At times of irrationality and militancy such as this, is there any safeguard left? One answer comes from the Paris blood transfusion trials. When the Professor of Transfusion Medicine at the University of Cambridge was sentenced to imprisonment for two years in France, a wise Regius Professor advised that what mattered in the university's response was the verdict of history. Cambridge, to its everlasting credit, continued the professorship with all the official mail (to the chagrin of the French activists!) being addressed to the Professor of Transfusion Medicine at the prison and moreover with the university continuing to pay his full professorial salary throughout. If the Council of the University of Auckland had been reminded in 1990 that they would later be judged by history, would they have made the shameful decision to deny emeritus status to Professor Bonham—a decision that now mars the academic repute of the university?

The verdict of history does matter. Linda Bryder's book, in putting the record straight, provides an outstanding example of the beneficial function of the medical historian. Her authoritative documentation of the events before and after 1987 now brings a redeeming distinction to the University of Auckland and with it an opportunity for New Zealand to begin to right the injustices of that time. Feeble attempts by the feminists to label her as 'a self-proclaimed medical historian', or patronizingly by the epidemiologists as 'a social historian . . . misunderstanding scientific evidence', only compound their unwillingness to

take responsibility for the consequences of their interventions. Those consequences have been dire. As Bryder details, the feminist zealots were on the crest of a wave and set about aggressively reorganizing on their terms the fragile infrastructures and interactions that integrate academic and service medicine. It was a disaster. The mood of the zealots is seen in the boast of their leader, with respect to her gardening, 'There's something very satisfying about hacking and slashing gorse bushes. I pretend they are doctors'!

And now? The monument to the heritage of Cartwright and the militant feminists can be seen in Auckland, in the shell of all that remains of what was once, under Liley, Liggins, Bonham and Green, one of the great clinical medical centres of the world—the National Women's Hospital.