## Comment

## Spanish Toxic Oil Syndrome

The editors have received a letter from Sir Richard Doll, the contents of which follow:

I read with interest the article by Chris Beckett on those of my personal papers that are now held at the Wellcome Library for the History and Understanding of Medicine and appreciated the trouble he had taken to present a coherent account of the development of some aspects of my work. There was, however, one brief section which disturbed me, as it could be used detrimentally by those few people who still dispute the cause of the extraordinary epidemic of an unknown disease that swept across northwest Spain in May and June 1981 and has come to be called the Spanish Toxic Oil Syndrome.

Beckett describes how I was asked by the WHO and the Spanish Department of Health to provide an independent assessment of the cause of the epidemic and how, after studying the original reports and visiting Spain to interview scientists who held minority views, I wrote a report in which I said that the epidemiological evidence certainly pointed to adulterated oil sold on the street as pure olive oil as the cause of the disease, but that there were too many gaps in the evidence to allow a firm conclusion. I suggested how some further research might enable a definite conclusion to be reached. Then, twenty months later, I wrote an addendum to my report to the effect that the new evidence that had accumulated in the interim had changed the situation and that in my opinion the evidence was now strong enough to conclude that the oil was the cause of the disease, despite the continued inability to isolate a toxic chemical that could reproduce the disease in animals.

Unfortunately, Beckett's account does not make clear why I changed my view and could leave the impression that it was due to pressure from the Spanish authorities, whereas it was due to the provision of new evidence. This included the detailed investigation of cases reported to have occurred outside the epidemic zone which strengthened the belief that the specific disease occurred only in people who had consumed the suspect oil and, most importantly, the demonstration by workers at the US Center for Disease Control of a sharp dose-response relationship between the risk of developing the disease and the amount of contamination of so-called olive oil by compounds of aniline, which was added to oil to permit its import free of tax as "industrial oil".

Anyone who is interested can now read my report and its addendum, which have been published in a Spanish scientific journal,<sup>2</sup> when, if they do, they will, I hope, agree that my change of mind was scientifically justified.

Richard Doll

<sup>&</sup>lt;sup>1</sup> Chris Beckett, 'An epidemiologist at work: the personal papers of Sir Richard Doll', *Med. Hist.*, 2002, **46** (3): 403–21.

<sup>&</sup>lt;sup>2</sup>R Doll, 'The aetiology of the Spanish Toxic Syndrome: interpretation of the epidemiological evidence', *Gac. Sanit.*, 2000, **14** (suppl. 3): 72–88.