Smoking kills: the revolutionary life of Richard Doll

Conrad Keating
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Sir (William) Richard Shaboe Doll (1912–2005), described by the *British Medical Journal* as "perhaps Britain's most eminent doctor", ushered in a new era in medicine: the intellectual ascendancy of medical statistics. Doll was the giant of Oxford medicine who, with Austin Bradford Hill, not only helped determine the link between smoking and lung cancer, but also helped integrate a statistical approach into both public health and patient care.

Many eloquent obituaries have been written,[1–3] but in this detailed, forthright and authorized biography of Doll, Conrad Keating, the writer in residence at the Wellcome Unit for the History of Medicine at Oxford University, also opens a window on social conditions throughout 20th-century Britain. This book would appeal to anyone with an interest in scientific, medical and social history, public health, epidemiology, cancer, tobacco or Oxford University.

Doll became a non-conformist early and remained so until his death. By the time he finished school he was already turning away from religion and towards pacifism and socialism. Despite coming from an "establishment" (upper-class) background, as a young man in the 1930s, he was deeply affected by the suffering, mass unemployment and malnutrition he witnessed. His antifascist politics led to him joining the Communist party and he described himself as a "democratic communist". He became increasingly aware that much disease and premature death could be prevented by social change.

He studied medicine at St Thomas's Hospital, London (1931–7) and, after service in the Second World War, became an epidemiologist – an ideal vocation for a numerate doctor with a social conscience, since it permitted him to apply his talents to major public health problems around the world. He eventually researched an extraordinary range of health issues including smoking, asbestos, the oral contraceptive pill, HIV/AIDS, radiation and fluoridation.

At the end of the Second World War, Britain had the highest incidence of lung cancer in the world – and no one knew why. Doll himself originally thought the increase might be due to occupational factors, or to the tarring of roads, as there were known carcinogens in tar.

By the end of 1950, studies from different countries had linked smoking and lung cancer, the best being those by Doll & Hill and by Wynder & Graham. Doll and his mentor Bradford Hill went on to show that smoking caused not only lung cancer but also many other diseases. Even with solid science, it was many frustrating years before the medical profession, politicians and the public really accepted the evidence.

Doll and Hill chose the path of acting only as scientists, presenting the evidence and allowing others to act upon it. They were concerned that if they campaigned, it could lead to their scientific objectivity being questioned. But, increasingly in his later years, Doll testified in court against the tobacco industry and advocated bans on tobacco promotion.

Oxford medicine may owe more to Doll than to anyone else in the 20th century, according to Keating. He moved to Oxford in 1969 as Regius Professor of Medicine, where he helped train many of the next generation of medical researchers and became the founder of Green Templeton College. Doll made Oxford a world centre for epidemiology and his techniques have been widely adopted by his students across the world.

Doll was knighted in 1971 and made a Companion of Honour in 1996. He received numerous honorary doctorates and fellowships from around the world. I and many others felt that he should have rece ived a Nobel Prize.

The 25 years after Doll's retirement in 1979 as regius professor were amazingly productive. He wrote, travelled, lectured and collaborated with many others in new research. Until weeks before his death in 2005, Doll continued working daily in the Cancer Epidemiology Unit (directed since 1989 by Valerie Beral) or the Clinical Trial Service Unit (co-directed since 1985 by Rory Collins and Richard Peto). He enjoyed a long and happy marriage to Joan Faulkner, who had worked at the Medical Research Unit (and had led Doll into his first job) until her death in 2001.

Doll thought, wrote, and spoke clearly. Keating describes him as often perceived as an elegant and austere intellectual, but with a dry and mischievous sense of humour. I remember him with much respect and fondness. In the early 1990s, Doll attended a lecture I gave on the tobacco epidemic in Asia. I introduced the epidemiology, then spoke of the "scientific evidence". After the talk, Doll said to me, politely but firmly: "Epidemiology *is* science". I never dared make that mistake again!

One twist in the tale was an uncannily-targeted e-mail that I received after his death, supposedly written by a chaplain who claimed to be an executor of his will, informing me that Doll had left me £400 000 for my work on tobacco control in Asia and asking me to contact a "lawyer" for my bank details. The giveaway was the description of Doll as "always a Christian gentleman..." The writer had not, like Doll, been meticulous in checking his facts. ■

review by Judith Mackay[a]

References

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