

Germany has spent two generations trying to understand the horrors of the Third Reich and to atone for its transgressions. Russia began to face its dark past soon after Stalin's death, when Khrushchev opened the gates of the Gulag and had the dictator's embalmed corpse removed from the Red Square mausoleum. China's turn is yet to come.

If, as is likely, such an accounting does not happen soon, the direct memories of survivors will be lost. Of course, the archives of the Chinese communist party and of its enormous secret police apparatus will eventually be opened and yield—much like the party and KGB archives in Russia since 1991—some of their long hidden secrets. Many facts we will never know. A leading Chinese demographer found that even casual surveys of villages in areas that experienced the worst starvation show an unusually high extent of mental impairment among adults born during the famine years (X Peng, personal communication). Given the importance of nutrition for the development of mental capacities during infancy and early childhood this was a predictable tragedy.¹⁵ We will never know how many millions of survivors throughout China have had their lives twisted in this terrible way.

Finally, what are we to make of the Western indifference to the great famine? Eyewitness stories of refugees who fled to Hong Kong were widely dismissed and rarely reported during the famine years. Two generations later a journalistic account is the only fairly comprehensive volume on the famine published in the

West.¹⁶ Incredibly, the 1997 edition of the *New Encyclopaedia Britannica* does not even list the catastrophe in its tabulation of famines of the past 200 years.¹⁷ An in depth scholarly history of the famine has yet to be written.

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The price of coffins: specious arguments by eminent doctors against the dangers of tobacco

P Cowen

One does not avert death by ignoring the price of coffins.
Ernest Bramah, *Kailung Unrolled His Mat*

In June 1957 the BBC radio news reported on a white paper, prepared by Doll and Hill, which had been presented to parliament.¹ The paper claimed that cigarette smoking appreciably increased a person's risk of developing lung cancer, with the incidence increasing in proportion to the number of cigarettes smoked. This news was published in a statement by the Medical Research Council,² which referred to Doll and Hill's findings published in the *BMJ* and the *Lancet*. The minister of health at the time was asked in parliament what he intended to do about the findings. His response was "nothing" (which was the case) and that it was up to the medical officers of health to act on this information as they saw fit.

Responses to the white paper

Having smoked over 20 cigarettes a day for 11 years I was alarmed by this information and decided to stop immediately; I have not smoked since. Shortly after quitting I began to take an interest in the response to the white paper and was surprised by what I found. In general, newspaper articles reflected resistance to the

Summary points

Good evidence shows that smoking causes lung cancer

The media's response to this information was initially resistant

Specious arguments were used to detract from the real issue, which confused the general public and lessened its concern

After 40 years there has been little change in smoking rates

findings—for example, the chairman of the Tobacco Workers Trade Union was reported in the tabloid press about 1960 as saying that cigarettes alone could not be blamed for lung cancer as no one knew what they had been lying next to in the shop.^{3 4}

More important were the pronouncements of professionals whose opinions could influence the general public but who, in some cases, had no authority to

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Tobacco too? The brief of the Advisory Committee on Drug Dependence was “to keep under review ... drugs which are likely to produce dependence”

comment on Doll and Hill’s findings. One person who supposedly had that authority was Sir Ronald Fisher, the “father of statistics,” who was a consultant to the Tobacco Manufacturers’ Standing Committee. His argument, quoted in the national press, was that although lung cancer occurred in cigarette smokers it did not necessarily follow that the cancer was caused by cigarettes because there might have been something in the genetic make up of people destined to have lung cancer that made them addicted to cigarettes.³ This may have been possible—it is a rational argument—but was it the most likely explanation? Interestingly, the genetic make up of a potential person with lung cancer militates against him or her becoming a Seventh Day Adventist.⁵

In the first instance facts should be evaluated in the light of previous experience. What constitutes the most likely explanation of observations may be contentious but should not produce the contradiction that the MRC report evoked. The report clearly referred to “the most reasonable interpretation,” and Sir Ronald’s argument was put into proper perspective in the *Chest and Heart Bulletin*.⁴

Adding to the obfuscation was the suggestion by psychiatrists that genetic make up may show itself as a personality defect, which manifests as a desire to smoke. Nothing of practical value has emerged from this observation. Professor Eysenck of the London University Institute of Psychiatry wrote that “alternative hypotheses [for the cause of lung cancer] exist and should not be neglected” and that “because smoking and cancer are associated statistically, that does not mean that smoking has caused the cancer.”⁶ Was “statistically” used intentionally to hint that figures were manipulated and therefore suspect? What bemused me was that the critics of Doll and Hill’s report could airily dismiss its conclusions. Even if factors other than cigarettes were responsible for lung cancer, considering the gravity of the disease and its probable prevention—in many cases simply by abstention—was it justifiable to detract from Doll and Hill’s findings by supercilious arguments?

Added confusion

On 12 November 1958 the *Daily Telegraph* reported an address by consultant physician Sir Walter Fergusson Hannay saying, “when he [Sir Walter] heard the health minister’s announcement that cigarettes were the cause of cancer he turned to a medical colleague and said ‘they will be blaming mother’s milk next’ and sure enough the scientists had now proved experimentally that in a certain strain of mice mother’s milk can be cancer-causing.”⁷ Sir Walter was slightly behind the times—it had been known for about 20 years that breast tumours in certain strains of mice were caused by a virus (the Bittner factor), which is passed to offspring through the mothers’ milk. It is indefensible to ridicule a classic piece of cancer research in order to suggest the ridiculousness of another piece of cancer research. Sir Walter also said that the MRC’s findings were “a staggering and most unscientific claim” and that they were based entirely on statistical evidence. If the evidence may not be statistical then what should it be—clairvoyant?

Again, how could the public have been expected to judge the situation when Mr Dickson Wright, an eminent surgeon at St Mary’s Hospital in London and treasurer of the Imperial Cancer Research Fund, was quoted in the *Daily Express* of 5 October 1958 as saying “nearly everything we do produces a small crop of cancers. There is the smoking cancer, the sun bathing cancer and the overeating cancer. If you give up everything you enjoy, living would not be worthwhile.” The reference to a “crop” of cancers implies a trivial disease. The fact is apparently ignored that a crop of cancers is not like a crop of boils where the patient almost always survives the first of the crop. The significance of the overeating cancers is somewhat obscure. The importance of “sunbathing cancer” in fair skinned people exposed to sunlight had been known for many years, and any doctor who did not point out its danger but said “life would not be worthwhile if you gave up everything you enjoyed” would be culpable.

Realistic conclusion

Much that was unhelpful has been said on this subject during the past 40 years. At the best, authority gave no voice to guide the public. At the worst, some fatuous nonsense served only to perplex.

My first job, in 1945, involved experimental cancer research and I was often asked at that time how much advance had been made. The answer then was “little.” Although a fair amount of advance has been made since, it is irritating to know that the most important cancer research was in cigarette smoking, since the ideal of medical practice is prevention rather than cure. It is completely irrelevant whether or not tobacco tars produce tumours in animals, and although genotypes and psychological status should be considered it is entirely wrong to advocate unproved possibilities, which cloud the issue for the public. For practical purposes cigarette smoking in humans causes lung cancer, and it has been shown since 1957 to cause emphysema and to be arteriopathic.

The tragic thing about the pathogenic effects of smoking is that the poison—for that is what it is by any definition—has a long latent period. If the effects of

cigarette smoking were seen a year or two after starting smoking, instead of 20 years or 30 years, few people would smoke. Why little was done to disseminate the knowledge of the carcinogenic and later the other effects of smoking is not for debate here but would include addiction and government income.

Continued delusion

This article relates to one published in 1961,³ which concluded that “if those who reason in a misleading fashion are permitted to confuse the public and if the tobacco manufacturers consult statisticians who give a one sided view of the argument, people will continue to die unnecessarily of lung cancer”; are we much more advanced after 40 years?

In 1994 Doll et al published the results of a 40 year comprehensive survey of mortality in relation to smoking⁸ and concluded that “about half of all regular

smokers will eventually be killed by their habit.” Nevertheless, in a detailed discussion in 1999 on measures required to curb smoking, Chambers⁹ pointed out that smoking rates had risen for the first time since 1970. How strange that such a pernicious habit, with its concomitant morbidity and mortality, persists.

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Dwale: an anaesthetic from old England

Anthony J Carter

I'll imitate the pities of old surgeons

To this lost limb, who ere they show their art

Cast one asleep, then cut the diseased part.

Thomas Middleton (1570-1627), *Women beware Women*

Before the advent of general anaesthesia, it is generally believed, a patient undergoing an operation could have expected little in the way of support other than from the bottle or from an ability to “bite the bullet.” But there is compelling evidence of an earlier age of anaesthesia. Descriptions of anaesthetics based on mixtures of medicinal herbs have been found in manuscripts dating from before Roman times until well into the Middle Ages. Most originated in regions of southern Europe where the relevant herbs grew naturally. A typical one, dated 800 AD, from the Benedictine monastery at Monte Cassino in southern Italy, used a mixture of opium, henbane, mulberry juice, lettuce, hemlock, mandragora, and ivy.¹

There is no evidence to suggest that similar recipes existed in the British Isles at that time.² However, in 1992, an extensive study succeeded in identifying a large number of similar recipes in late medieval (12th-15th century) English manuscripts.³ All identified the anaesthetic, a drink, by the name dwale. A typical manuscript (fig 1), translated into modern English, reads:

“How to make a drink that men call dwale to make a man sleep whilst men cut him: take three spoonfuls of the gall [bile] of a barrow swine [boar] for a man, and for a woman of a gilt [sow], three spoonfuls of hemlock juice, three spoonfuls of wild neep [bryony], three spoonfuls of lettuce, three spoonfuls of pape [opium], three spoonfuls of henbane, and three spoonfuls of eysyl [vinegar], and mix them all together and boil them a little and put them in a glass vessel well stopped and put thereof three spoonfuls into a potel of good wine and mix it well together.

Summary points

Although general anaesthesia is little more than 150 years old, the use of medicinal herbs to render patients unconscious before surgery goes back to Roman times

Recent studies have identified a large number of recipes for a herbal anaesthetic known as dwale, written in medieval English

These include two groups of ingredients, the harmless and ineffectual—bile, lettuce, vinegar, and bryony root—and the powerful and dangerous—hemlock, opium, and henbane

In spite of its dangers, dwale was widely known about, and would have been administered by ordinary housewives, caring for loved ones

“When it is needed, let him that shall be cut sit against a good fire and make him drink thereof until he fall asleep and then you may safely cut him, and when you have done your cure and will have him awake, take vinegar and salt and wash well his temples and his cheekbones and he shall awake immediately.”

This paper discusses the ingredients in the dwale recipe, the recipe's likely origins, and the possible circumstances and consequences of its use.

Ingredients

In addition to alcohol, the ingredients in dwale are, in order of their listing, bile, hemlock, bryony, lettuce, opium, henbane, and vinegar.

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