

to argue that the source is tainted. Also, Hoffmann—who lived until 1946 without ever publishing his own account of the discovery of aspirin—repeatedly spoke of Dreser setting the drug aside, albeit without indicating for how long. But had it only been for a short period, he would not have mentioned it.

In deciding whether it is Hoffmann or Eichengrün who initiated the events leading to the introduction of aspirin, the unreliability of the 1934 footnote about Hoffmann must be balanced against the plausibility of the 1949 paper by Eichengrün. The most reasonable conclusion is that Arthur Eichengrün was telling the truth when he wrote that acetylsalicylic acid was synthesised under his direction and that the drug would not have been introduced in 1899 without his intervention.

F Bayer & Co was truly fortunate in having Eichengrün as an employee, yet it is unlikely that he would have discovered aspirin had he not been working for the company. Its successor, Bayer AG, had every reason last year to celebrate proudly the centenary of the most widely used drug in history.

I thank M Frings and H-H Pogarell of Bayer-Archiv, Leverkusen, as well as their former colleague Dr M Busch, for valuable assistance throughout the course of my investigations and visits to the archive. I am also indebted to Joan Girling for the translation of the paper in *Pharmazi*.

Funding: None.

Competing interests: None declared.

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Serial homicide by doctors: Shipman in perspective

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BMJ 2000;321:1594-7

The previous BMA chairman, among others, is on record as saying that Harold Shipman is unique, yet medicine has arguably thrown up more serial killers than all the other professions put together, with nursing a close second.¹⁻⁴ Dentistry too has had its notorious characters, yet among veterinarians homicide seems to be almost unknown.

“Jack the Ripper,” the perpetrator of five unsolved murders in 1888 in London, is thought to have been a member of the medical profession, although there is no conclusive evidence. Sir William Gull, “physician in ordinary” to Queen Victoria, and Dr Thomas Barnardo were prime suspects, and there were advocates for Montague John Druitt, a barrister (he was from a respected medical family and may have passed himself off as a doctor); a Dr Stanley (he may have been fictitious); the Polish Dr George Chapman (real name Severin Klosowski); and the Russian Dr Alexander Pedachenko.⁵⁻⁷ Nor has conclusive evidence been found for Gaylord Sundheim (a psychotic who had studied medicine) being the “mad butcher” of Cleveland, Ohio, in the 1930s.⁸

The power of life and death

Yet there are enough recorded instances of multiple murders by doctors (real or bogus) to make at least a prima facie case that the profession attracts some

Summary points

Arguably medicine has thrown up more serial killers than all the other professions put together

The medical profession seems to attract some people with a pathological interest in the power of life and death

Doctors have been responsible for killing not only patients and strangers but members of their own family

The political killers par excellence were the Nazi doctors and the Japanese doctors engaged in biological warfare

people with a pathological interest in the power of life and death. Would be doctors with homicidal tendencies include Kenneth Bianchi, one of the serial “Hillside Stranglers” in 1978 (his cousin was the other murderer), who had always wanted to be a psychiatrist and indeed set himself up as a psychological counsellor after assuming a false identity,⁹ and William Henry Theodore Durrant, a San Francisco medical student and Sunday school superintendent who

murdered two women in a church in 1895, nine days apart, the so called “Demon in the Belfry” murders.¹⁰ He was hanged three years later. Robert Diaz, a Los Angeles nurse, had always wanted to be a doctor and often pretended he was one—he would give unauthorised injections and even as a nursing student liked to be called “Dr” Diaz. In 1984 he was sentenced to the gas chamber for murdering 12 patients with lignocaine (lidocaine).¹¹

Family killers

Real doctors who killed in the 19th century include the American Edward William Pritchard. Before poisoning his mother-in-law and first wife with antimony, Pritchard killed his fourth child and insured a servant girl who then died mysteriously. He was the last person to be publicly hanged (1865) in Glasgow. American Dr Bennett Clarke Hyde killed three of his in-laws, inheritors of the family estate, by bacteriological methods as well as bleeding, cyanide, and strychnine.^{12–15} Hyde’s sister-in-law also became ill with “the typhoid” that had killed the three other in-laws. The doctor who was to give evidence against him died before the trial in 1910.

Bacteriogenic shock may also have been the means of murder in a later case in America when the rich wife of a Dr John Hill died after a short illness. She was embalmed before the toxicological tests her father demanded could be done.¹⁴ Hill’s second wife, his ex-mistress, alleged he also tried to kill her. She said that he had told her he had killed his brother with morphine and his father and a friend. He was assassinated on his doorstep in 1972.

Dr Jeffrey Macdonald of the US army (the “Green Beret Killer”) was, after several abortive investigations, brought to justice for the murders of his pregnant wife and children in 1970.¹⁵ The heavily insured wife and brother of general practitioner William Palmer died suddenly of sickness and convulsions, preceded by his mother-in-law of “apoplexy” in 1849.¹⁶ He was a serial forger and also poisoned a betting crony with strychnine. Other doctors who were called in to confirm the death accepted his explanations of natural death. In 1881 Dr George Henry Lamson poisoned his two brothers-in-law for their legacies, at least one with aconitine, the only recorded case of its use to kill.¹⁷ Dr De La Pommerais used digitalis to kill his mother-in-law for her estate and then his mistress for her insurance money in 1863.¹⁸

In 1954 Dr Sam Sheppard (of “The Fugitive” fame) was convicted of killing his wife by 35 blows to her head.¹⁹ Then his mother and mother-in-law died, it seemed from suicide, and he was sued after two surgical deaths. His second wife obtained a restraining order because of his threats to kill her.

Dr J Milton Bowers’ three wives were all heavily insured and died in suspicious circumstances, one in 1865 and the other two in the 1880s. His brother-in-law, who died of cyanide poisoning, left a confession exonerating the doctor, but this confession was probably forged by Milton Bowers.²⁰ Milton Bowers died in 1905.

Another doctor who killed his three wives, this time with aconite, was Dr Warder of Brighton, who gave evidence as a poisons’ expert at Palmer’s trial in 1856 and

who escaped the hangman’s noose by taking cyanide.²¹ Dr George Chapman, one of the “Jack the Ripper” suspects, was hanged for the serial poisoning of three of his partners with antimony.²²

In 1947 Dr Robert George Clements, a fellow of the Royal College of Surgeons, murdered his fourth wife with morphine for her money. He may have murdered his first three wives too as he signed their death certificates.¹⁰ Both he and the doctor he called to examine his dying fourth wife diagnosed leukaemia. This doctor later committed suicide.

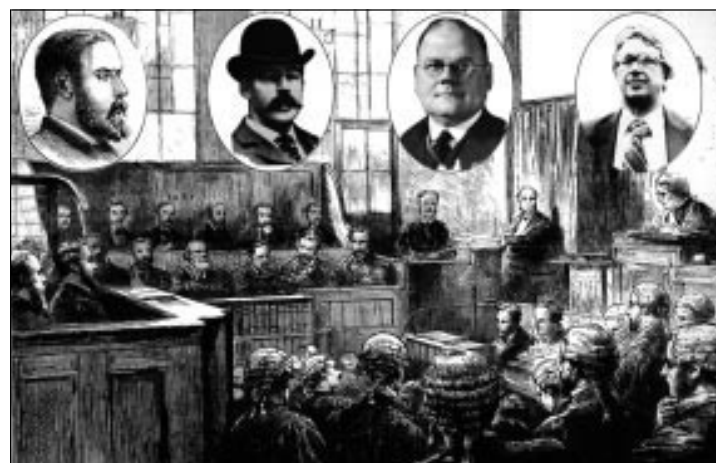
Dr Carl Coppolino, an anaesthetist, murdered his wife, who was a doctor, with a muscle relaxant. Under his direction his mistress also injected her husband with the muscle relaxant, who died suddenly of “coronary thrombosis” after being attended by Coppolino.¹⁰ He was convicted in 1967.

In 1935 Dr Buck Ruxton dissected his wife and maid (the “jigsaw murders”) and scattered their parts in the Scottish Borders.²³ Both he and Dr Hawley Harvey Crippen, whose two wives predeceased him (he was hanged in 1910), are in Madame Tussaud’s Chamber of Horrors. Dr Henry Lovell William Clark, a doctor in the Indian medical service in the 1930s, conspired with his mistress to murder first her husband (with arsenic to simulate “heat stroke” topped up with gelsemine to treat the “heat stroke”) then his wife, who was killed by four paid assassins.²⁴

In the past 15 years two American doctors have committed double filicide. A doctor from St Louis murdered his two sons, several years apart, for their insurance money. Dr Debra Green, an oncologist who was an alcoholic, killed two of her children by arson and also confessed to the attempted murder of both her third child by arson and her husband (a cardiologist) by ricin poisoning.^{25–26}

Killers of strangers

Dr Thomas Neill Cream, the London “Prostitute Poisoner,” was the first male serial killer to be hanged in Britain (1892).²⁷ He also killed three women in America. Dr Michael Swango (“Dr Poison”), one of America’s most prolific serial killers, also killed several people in Africa in the 1990s, yet the medical establishment seemed unable to believe a doctor could



Doctors on trial: Pritchard’s 1865 trial, with (left to right) Edward William Pritchard, Harry Howard Holmes, John Bodkin Adams, Mario Jascalevich



Marat—a trailblazer in political serial killing “by proxy”

be such a monster.²⁸ He was sentenced to life imprisonment last September. As with Swango, Dr Marcel Petiot, France’s worst ever serial killer, was another doctor who began as a petty criminal.²⁹ He murdered up to 100 people during the second world war for their possessions under the pretence that he would help them escape.

American Dr Morris Bolber and his gang made a fortune from an insurance scam that involved killing 30 poor Italian immigrants in the thirties.¹⁰ Bolber teamed up with the “Philadelphia Witch,” a woman who had poisoned her husband, who provided the names of potential victims. He progressed from contrived “accidents” to death by “natural means”—a canvas bag filled with sand to cause cerebral haemorrhage without leaving a mark.

Killers of patients

In 1967 Dr Ronald E Clark from Detroit, Michigan, a former mental patient, sexually assaulted his patients and then killed them with sodium pentothal.³⁰ A decade later Dr Mario D Jascavech from New Jersey murdered five of his patients with curare—the so called “Dr X” killings. A Norwegian doctor, Arnfinn Nessel, may have killed as many as 138 of his patients using curare over a five year period in the late 1970s, perhaps obtaining sexual satisfaction while watching them dying.³¹ He at first used an insanity, then a euthanasia, defence, but the jury found him guilty on 21 counts of murder.³²

Dr John Bodkin Adams, a general practitioner from Eastbourne and forger of prescriptions, who possibly provided the role model for Shipman (they had a colleague in common), also admitted at his trial in 1957 to “easing the passing” of some of the old ladies (possibly up to 400) who died under his care (he was mentioned in 132 of the wills).^{33–35} In 1823 Parisian Dr Edme Castaing, a will forger, poisoned two

patients with newly introduced morphine.²¹ In 1892 American Dr Thomas Thatcher Graves persuaded his patient, the recent widow of a rich husband, to give him power of attorney. He then posted her a bottle of poisoned whisky, which killed her and her friend.¹⁰ Although Thatcher Graves was supported by his patients (as was Shipman), he poisoned himself in his cell in 1893. Dr Harry Howard Holmes, the “torture doctor,” was reported to have killed at least 200 women in his “murder castle” in Chicago between 1892 and 1896.³⁶ He was the first serial killer hanged in America.

The “political” serial or mass killers par excellence were the Nazi doctors who engaged in ethnic cleansing and the Japanese doctors who engaged in biological warfare,^{37–40} although Dr Jean-Paul Marat, one of the most bloodthirsty intellectuals behind the French revolution, was a trail blazer in political serial killing “by proxy.” Marat wrote: “In order to ensure public tranquillity, 200 000 heads must be cut off.” His pamphlets warning of plots to assassinate all good citizens in their beds led to massacres not only of aristocrats but of the inmates of jails (nearly 1200), prison hospitals, and mental asylums. Marat’s assassination in 1793 made him a martyr in the public’s eyes, and all over France streets and towns were named after him.⁴¹ Possible successors include Serbian psychiatrist Radovan Karadzic, currently wanted for genocide and crimes against humanity, and the Argentinian doctors charged in 1992 with murdering patients for their organs.^{42–43} The evil Haitian dictator “Papa Doc” Duvalier, first known as a humanitarian specialist in tropical medicine, organised purges and mass executions in the 1960s: he allegedly swore to kill 300 people a year.⁴⁴

Although the likelihood of a repeat of the killings by “serial euthanasia” of Nessel or Shipman may be remote, the fact that there are currently two major police investigations into multiple deaths in hospital—one in France,⁴⁵ the other in Britain⁴⁶—suggests increased awareness by the authorities. History does tend to repeat itself.

Competing interests: None declared.

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(Accepted 9 November 2000)

Cover story

O Happy day

Tony Delamothe



We chose Blake's colour printed engraving for the cover as an image of transcendent happiness. It was produced by someone who led "a life of the deepest obscurity and occasional suffering" but whose reputation is currently soaring.¹ The largest ever exhibition of Blake's works can be seen at Tate Britain, London,

until February, after which it moves to the Metropolitan Museum of Art, New York.

Blake's life and times

"Shall I call him Artist or Genius—or Mystic—or Madman? Probably he is all," wrote a contemporary of Blake two years before his death in 1827.² Since then the list of terms has been augmented with proto-Marxist, noble savage, psychedelic guru, ecologist, and founder of English anarchism.³ Whatever your needs for a countercultural precedent, Blake is your man.

In his writings and pictures there is never any doubt about which side Blake was on: he was for sexual and racial equality and against capital, taxes, empire, laws, morality, state, church, and academy.³ It's ironic, therefore, that his best known words are those that Sir Hubert Parry set to music in that battle hymn of the English, "Jerusalem." Composed during the first world war, the hymn seems a celebration of Edwardian grace under pressure and has become a fixture at that festival of Englishness, the Last Night of the Proms.

Bring me my Bow of burning gold:
Bring me my Arrows of desire:
Bring me my Spear: O clouds, unfold!
Bring me my Chariot of fire.

I will not cease from Mental Fight,
Nor shall my Sword sleep in my hand
Till we have built Jerusalem
In England's green and pleasant Land.⁴

Jerusalem is relevant to the cover illustration, known variously as "Glad Day," "Albion rose," and "The Dance of Albion" (several slightly different versions exist). Its meaning is bound up in Blake's complicated personal mythology, populated by such entities as Los, Orc, and the Four Zoas (which includes Urizen, the embodiment of unimaginative reason). Blake may have resorted to this Star Wars cast list in part to allow him to espouse political beliefs that would have got him into trouble during the crackdown on dissent that followed the French revolution. For example, Orc is Energy, the spirit of Revolution, who breaks from his chains at the outbreak of the American Revolution. His fires burn up the hypocrisy of conventional morality.²

Prisons are built with stones of Law, brothels with
bricks of Religion.

The tygers of wrath are wiser than the horses of
instruction.

The road of excess leads to the palace of wisdom.

Energy is eternal delight.

If the doors of perception were cleansed everything
would appear to man as it is, infinite.

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BMJ 2000;321:1597-8