

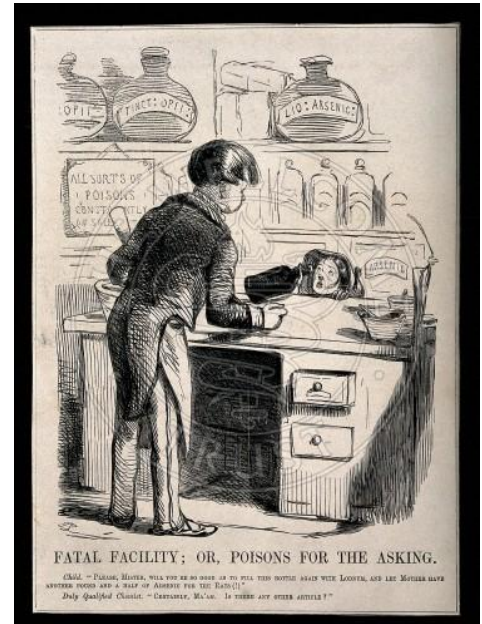


The evolution of pharmacy Theme E, Level 1 The control of harmful substances

The origins of control

Medicines available before the nineteenth century varied from harmless flavoured waters to dangerous poisons. Yet until the mid-1800s their supply was unregulated: there were no substances restricted to supply only on prescription, no need for anyone to ask questions about the intended use of a particular poison, and no need to keep records of any sale.

In the late 1840s public concern emerged about the unrestricted availability of poisons. Reports began to draw attention to the large number of deaths resulting from poisoning. More than a third resulted from the use of arsenic. Many solutions to the problem were proposed, including a total ban on its retail sale, and the reporting of every sale to the nearest police station.



The Arsenic Act 1851

In 1849 the Pharmaceutical Society, together with the Provincial Medical and Surgical Association (which became the BMA in 1855), put forward proposals to the Home Secretary. These formed the basis of the Arsenic Act 1851. For the first time retail sales of poisons were to be restricted. Records of every sale had to be kept, the purchaser had to be known to the seller, and the arsenic had to be mixed with soot or indigo to colour it.

In the late 1850s a series of high profile poisoning cases resulted in calls for greater control over the sale of poisons. In May 1868 a bill produced by the Pharmaceutical Society was introduced in the House of Lords. An attempt to limit the supply of powerful drugs to prescription only was defeated. The position of the Pharmaceutical Society was that the most effective safeguard in the supply of poisons to the public was to restrict their sale to pharmaceutical chemists, who would be able to exercise their professional judgment. Arrangements made under the Arsenic Act were extended to twenty commonly used poisons, including opium, strychnine and prussic acid. A pharmaceutical regulatory system prevailed.

The expansion of control

With enactment of the **Pharmacy and Poisons Act 1868** the Pharmaceutical Society was granted powers to deem a substance a poison, to decide which substances should be available for sale, and who should be allowed to become both authorised (chemists & druggists) and listed (agricultural and horticultural suppliers) sellers of poisons.

The **Pharmacy Act 1908** gave pharmacists further responsibilities in relation to the control of poisons. It insisted that the purchaser of opiates should be known to the seller, and that an entry be made in the Poisons Register. But it placed no control over the manufacture or possession of narcotics. Both opium and cocaine were freely available without prescription. The Pharmaceutical Society was given the task of policing the Act; the only protection against abuse was the professional discretion of the pharmacist.

A series of conferences on opium culminated in the International Opium Convention signed at The Hague in 1912. With the end of the First World War signatories were obliged to take action. In Britain this agreement formed the basis of the **Dangerous Drugs Act 1920**. This committed signatories to restricting the trade and consumption of drugs to 'medical and legitimate uses'. It prohibited the import of opium prepared for smoking, and the import, export and manufacture of raw opium, cocaine, heroin and morphine except under licence.

The emergence of new substances

The development of a number of potent medicines, including barbiturates and digitalis, necessitated some revision to poisons legislation. The result was the **Pharmacy and Poisons Act 1933**. It contained a Fourth Schedule which listed poisons which could only be sold to the public in accordance with a prescription given by a doctor, dentist or veterinary surgeon. This represented a major increase in the medical profession's control of the supply of drugs to the general public.

Despite legislation which outlawed the supply of medicines for conditions such as cancer and venereal disease there remained concerns about the content of many medicines sold by retail. The **Food and Drugs Act 1938** made it illegal for a person to sell a drug labelled in a misleading way. It also became an offence to publish an advertisement which did so. But the value of this safeguard was seriously undermined by the fact that manufacturers of proprietary medicines were not required to disclose their composition, provided the appropriate medicine stamp was fixed to each container. This practice ended only with passage of the **Pharmacy and Medicines Act 1941**.

New kinds of harmful substances

By the 1920s there existed a number of substances for medicinal use which were neither poisons nor dangerous drugs. The **Therapeutic Substances Act 1925** regulated by licence the manufacture, but not the sale, of a limited number of products, the purity or potency of which could not be adequately controlled by chemical means. Such products included vaccines, sera, toxins, antigens and insulin. It was not considered necessary at first to restrict the supply of these substances, but the introduction of penicillin and other antibiotics meant that regulation of their manufacture and sale had to be addressed.

The **Penicillin Act 1947** and later the Therapeutic Substances (Prevention of Misuse) Act of 1953, recognised that antibiotics were substances 'capable of causing danger to the health of the community if used without proper safeguards'. These permitted their supply to the public only by medical practitioners, or from pharmacies on prescription. They were replaced by the **Therapeutic Substances Act 1956**, which brought the control of both the manufacture and the supply of therapeutic substances under a single statute.

Rationalisation of control

Only with passage of the **Medicines Act 1968** did the patchwork of legislation concerning the regulation of medicines finally come to an end. Medicines were no longer to be controlled under poisons legislation, and categories such as therapeutic substances were abolished. The term used in the Act was in fact not 'medicine' but 'medicinal product'. This was broadly defined to include any substance or article used for a 'medicinal purpose', which might be treating, preventing or diagnosing disease, or inducing anaesthesia. However, it did not include herbal medicines and foods with vague medicinal claims. The Medicines Act heralded in a new era in UK medicines regulation in which the retailing of medicines was finally rationalised.

FIND OUT MORE

Links to other sheets:

Theme B: History of the Pharmaceutical Society

Further reading:

Holloway, S W F, *The Royal Pharmaceutical Society of Great Britain: A political and social history, 1841-1991*, (Pharmaceutical Press, London, 1991)

Appelbe G E, 'From Arsenic to Thalidomide: A brief History of Medicine Safety', in Anderson S.C. (ed.), *Making Medicines: A Brief History of Pharmacy and Pharmaceuticals*, (Pharmaceutical Press, London, 2005)

Dale J R and Appelbe G E, *Pharmacy Law and Ethics*, 3rd Edition (Pharmaceutical Press, London, 1983)

Other resources:

Museum of the Royal Pharmaceutical Society Information Sheet: *Tracing people and premises in pharmacy*