



Legal implications of medication errors: charges of manslaughter against doctors and pharmacists in the UK from 1795 to 2005

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Introduction

- Medication errors in the prescribing, preparation, and giving of medicines represent risk factors for adverse drug reactions⁽¹⁾
- They are common and cause significant patient morbidity and can even lead to death⁽²⁾
- Drug-related injuries occurring in hospitals cost an estimated \$3.5 billion (£1.9 billion; €2.7 billion) a year⁽³⁾
- Medication errors can also have serious implications for health care professionals

Aims of Study

- To identify doctors and pharmacists in legitimate practice charged with manslaughter as a result of medication error in the UK between 1795 and 2005
- To classify each case as a mistake, slip/lapse, or violation, according to a recognised system of classification of human error

Search Strategy

- We searched the following databases and archives using multiple search terms

Archive / Database	Search terms
The Times digital archive (1795 to 1985)	(doctor or anaesthetist or surgeon or pharmacist or chemist or druggist or apothecary) and manslaughter
The Scotsman digital archive (1817 to 1950)	
Lexis Nexis (1985 to December 2005)	
Medline (1955 to December 2005)	
Embase (1974 to December 2005)	manslaughter
Wellcome Library catalogue	
Lancet (1823 to December 2005)	manslaughter, assizes, criminal court, or verdict

- We also hand searched the indices of the *Lancet* and the *British Medical Journal*

Results

- We identified 36 doctors and 17 pharmacists charged with manslaughter as a result of a medication error since 1795 (figure 1; table 1)
- Twenty eight doctors were charged in the past two decades, while only one pharmacist (and one trainee pharmacist) were charged in the same time period
- 9/36 of the doctors and 2/17 pharmacists were convicted

Table 1 – Doctors and pharmacists charged with manslaughter

Classification	Doctors	Pharmacists
Human error classification		
Slip/lapse	15	8
Mistake	15	4
Violation	2	0
Technical error	3	0
Unclassifiable	1	5
Medication error classification		
Prescribing	7	1
Preparation	3	16
Administration	24	0
Unclassifiable	2	0

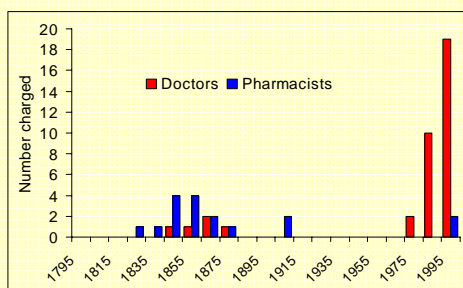


Figure 1 – Doctors and pharmacists charged with manslaughter

Slips

A LADY POISONED BY MISTAKE – We never remember having to record a more lamentable event than that which took place at the residence of Captain Serpison Smyth, near the town of Romney, on Tuesday last, which event has proved fatal to an amiable and beautiful lady, in the prime of life, the mother of five young children, and the beloved wife of the before-mentioned gentleman. It appears that for some time past Mrs. Smyth had been in rather delicate state of health, and had been in the habit of taking a

The Times, 6 November 1848; p. 7

November 1848 – A woman who obtained a mild tonic mixture from her chemist died from strychnine poisoning. By

accident, the chemist had used the same quantity (nine grains) of strychnine as salicine in making up the tonic. He was charged with manslaughter but acquitted.

April 1978 – A 4-year-old boy was given 650 mg of methotrexate into the brain, a 200 times overdose.

Doctor cleared over boy's drug death

A woman doctor wept at Cardiff Crown Court yesterday after she had been cleared of killing a boy aged four with an overdose of drugs.

The Times, 28 April 1978; p. 4

The boy developed convulsions and died. The junior doctor who had given the injection had taken the dosage from the case notes, "not knowing that it related only to intravenous drips." She was charged with manslaughter but acquitted.

Baby death trial told of mistake

The Scotsman, 18 April 2004; p. 4

April 2001 – A 3-day-old boy died after a junior doctor accidentally flushed a drip tube with phenytoin, instead of sterile water. An vial of phenytoin for a different baby some 20 minutes previously had been left opened on a bench. He was charged with manslaughter but acquitted.

Mistakes

Pharmacist at resumed hearing into baby's death

A PHARMACIST from South Cheshire at the centre of an inquiry death of a four-day-old baby given peppermint water containing 20 times the correct measure.

The Sentinel (Stoke), 15 June 2001; p. 8

March 2000 – A 3-week-old boy died of cardiac arrest following ingestion of peppermint water for colic. The trainee pharmacist confused chloroform water in its dilute double-strength form with concentrated chloroform water - which is a solution 20 times stronger. Both the pharmacist and trainee pharmacist were charged with manslaughter but acquitted.

Violations

February 2001 – A 56-year-old woman died after suffering a heart attack due to inappropriate anaesthesia. The anaesthetist was talking on a mobile phone instead of monitoring the patient. He was convicted of manslaughter and sentenced to 6 months in prison suspended for 1 year.

Patient died while doctor was on phone

Campbell Mitchell

A DOCTOR who chatted on his mobile phone while his patient died in his dental chair was found guilty of manslaughter yesterday.

The Times, 23 February 2001; p. 4

Limitations

- Our search strategy relied heavily on newspaper and journal reports, which may have limited our classification of the cases

Discussion

- The cases we have identified highlight the impact that medication errors can have on both patients and professionals
- The majority of the cases we identified involved a slip/lapse or mistake during the preparation or administration of a drug. These are unconscious errors that are inescapable consequences of human actions
- Slips/lapses and mistakes are most likely to occur when people are tired, stressed, distracted, or in unfamiliar surroundings
- Prosecuting individuals following a medication error is unlikely to improve patient safety and will not address the root cause of error
- Improved safety will only be achieved through increased monitoring and improvements to the complex systems of healthcare.

Acknowledgements

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