The criminalisation of fatal medical mistakes

A social intolerance of medical mistakes has caused them to be criminalised

After pleading guilty to the manslaughter of his patient by gross negligence Feda Mulhem was given a custodial sentence of eight months. Dr Mulhem, who was only three days into his first post as a specialist registrar in haematology at Queen's Medical Centre, Nottingham, had instructed a junior doctor to inject an anticancer drug into the patient's spine. The drug should have been injected intravenously but Dr Mulhem had confused this drug with another that is given at the same time, which is properly injected into the spine. Within a few minutes the doctor realised the magnitude of his mistake and was visibly shaken, but it was too late to save the life of his teenage patient, Wayne Jowett, whose cancer was in remission.[1] Because Dr Mulhem had already served time in custody awaiting his trial he was released immediately, and the dead patient's father called the eight month sentence "absolutely ridiculous," for being too short.[2]

The anger of Wayne Jowett's father was understandable, but the use of the criminal justice system to punish Dr Mulhem is questionable. He was not seeking to harm his patient; in fact he was intending to further his recovery. His "crime" was that he made a mistake; he confused a drug that is injected intravenously with a drug that is injected in the spine. When a doctor is using such a powerful and potentially dangerous drug the professional obligation to get it right is naturally high. But even the most diligent, conscientious, and competent practitioner will make mistakes. Dr Mulhem's mistake was the 23rd incident reported worldwide[3] (and the 14th in 15 years in the United Kingdom[4]) in which this drug had been fatally and mistakenly injected into the spine. As Dr Mulhem said when interviewed by the police: "I know it's a lame excuse, but I am a human being."[3] Sadly, for Wayne Jowett, his family, and his friends, Dr Mulhem's mistake was one that had fatal consequences.

Dr Mulhem's prosecution is merely the latest of several prosecutions in recent years of doctors on charges for gross negligence manslaughter. In research published in the *BMJ* three years ago Ferner found that the tendency to prosecute doctors for manslaughter started in about 1990.[5] Between 1867 and 1989 he could find only seven cases. But in the 1990s he identified 13 cases involving 17 doctors. A further *BMJ* article in July last year observed that another six doctors had been tried for gross negligence manslaughter in the two and a half years since Ferner's research.[6]

Reports in the *BMJ* since last July disclose a further four concluded cases of gross negligence manslaughter, involving five doctors, including Dr Mulhem. In February Hiral Hazari, a preregistration house officer, was found not guilty of the manslaughter of his patient for failing to observe that a feeding tube had been inserted into the patient's lungs. Dr Hazari, who at the time was 23 years old and was just six weeks into his first job, is thought to have been the youngest doctor to have been charged with gross negligence manslaughter.[7]

In April Rajeev Srivastava and Amir Mizra, senior house officers, were convicted of causing the death of a patient after they failed to observe and treat, until it was too late, an unusual side effect of a knee operation they had performed. Their 18 month prison sentence was suspended for two years.[8] The following month Huraise Syed, urologist, was cleared by the trial judge who ruled, after hearing four weeks of prosecution evidence, that there was no case to answer.[9] The prosecution had claimed that Mr Syed's patient had bled to death during an operation that should not have been attempted.

This increase in prosecutions for medical manslaughter reflects society's changed attitude towards the notion of gross negligence. In 1925 the court of appeal stressed the importance of the negligence having to be gross when it said the accused's negligence must go beyond a mere matter of compensation between subjects and show such disregard for the life and safety of others as to amount to a crime against the state and conduct deserving of punishment.[10] In a 19th century case the court had noted that "if there was only the kind of forgetfulness which is common to everybody, or if there was a slight want of skill … it would be wrong to proceed against a man criminally in respect of such injury." The court then gave as an example of gross negligence the surgeon who operated while drunk.[11] In other words, previous generations were concerned to ensure that doctors were not prosecuted for the sort of mistake that a reasonably competent doctor could make due to an error of judgment or by mischance or misadventure.

But social attitudes to accidents have changed. A leaflet published by Accident Line, a company set up to encourage injured people to claim compensation, captured the idea that where there was an accident there may be somebody to blame when it stated "It was just an accident … or was it?" The leaflet then noted that "many people who believed at first that their accident could not be blamed on anyone … have gone on to make a successful claim."[12] In an editorial in the *BMJ* in June 2001 the journal declared that it had decided to ban the word accident from its pages. It argued that, since "most injuries and their precipitating events are predictable and preventable" the word "accident" should not be used to refer to "injuries or the events that produce them."[13]

The view expressed by Accident Line and the *BMJ* adopts and reinforces a social intolerance towards "accidents" as being events that have an innocent origin. This changed approach must have had an effect on the medical authorities, police, Crown Prosecution Service, lawyers, judges, and jurors who are involved in medical accidents that result in death. The test of gross negligence has been an element of gross negligence manslaughter for well over a 100 years, but its application to the surgery and hospital ward has changed in recent years. Our modern day intolerance of accidents as innocent events has tended to turn medical mistakes resulting in death into tragedies calling for criminal

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investigation. Dr Mulhem was not the first doctor to be convicted of killing by accident and sadly he is unlikely to be the last.

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1 Dyer C. Doctor sentenced for manslaughter of leukaemia patient. *BMJ* 2003;327:697.
2 Norfolk A. Doctor who killed teenager freed. *Times* 2003, September 24:p4.
3 Norfolk A. Doctor admits fatal blunder over cancer boy. *Times* 2003, September 23:p7.
4 Dyer C. Teenager given wrong drug dies. *Guardian* 2001, February 3. www.guardian.co.uk/uk_news/story/0,3604,432899,00.html (accessed 2 Oct 2003).
5 Ferner RE. Medication errors that have led to manslaughter charges. *BMJ* 2000;321:1212-6.
6 Dyer C. Doctors face trial for manslaughter as criminal charges against doctors continue to rise. *BMJ* 2002;325:63.
7 Dyer C. Junior doctor is cleared of manslaughter after feeding tube error. *BMJ* 2002;326:414.
8 Dyer C. Doctors walk free after manslaughter conviction. *BMJ* 2003;326:840.
9 Dyer C. Urologist cleared of manslaughter. *BMJ* 2003;326:1166.
10 R *v* Bateman (1925) 19 Cr App R 8, 11.
11 R *v* Doherty (1887) 16 Cox CC 306, 309.
12 Furedi F. *Culture of fear*. London: Continuum, 2002:11.
13 Davis RM, Pless B. BMJ bans "accidents." *BMJ* 2001;322:1320-1.

Shock in polytrauma

Needs better definition and perhaps more selective treatment

By 2020 bodily injuries are predicted to outpace infectious diseases worldwide in terms of years of productive life lost.[1 2] Evolving experience has shown that treatment plans for serious injuries require discrimination between the mechanism of injuries, their anatomic involvement, and their "staging."[2] Yet traditionally, many emergency medical services developed more simplified treatment algorithms without such discriminations, leading to misinterpretations and invalid conclusions from studies.[2] Also deployment configurations may account for conflicting data regarding certain interventions and unrecognised confounders (for example, overzealous ventilation or fluid resuscitation in severe haemorrhagic states) may obscure the benefits of other treatment.[2 3 4 5] Finally prospective clinical trials to either validate or refute interventions currently used are lacking.[3]

Evolving recommendations for haemorrhage after trauma

With these perspectives in mind traditional recommendations for managing shock in polytrauma are being questioned as being universally applicable, particularly in the preoperative phases of resuscitation.[4 5 6] Specifically the strategy of universally providing rapid infusions of crystalloid or colloid fluids to restore normal blood pressures before definitive haemostasis is being reconsidered.

Experimental and clinical data now indicate that aggressive fluid resuscitation before bleeding is controlled can cause additional haemorrhage through hydraulic acceleration of bleeding, dislodgement of soft clots, and the dissolution and dilution of clotting factors.[5 6] Because of the high risk of uncontrolled internal bleeding consensus statements now recommend deferring infusions until operative intervention when patients with penetrating injuries of the torso are conscious or have palpable pulses.[6]

Discriminating between mechanisms, sites, and staging of injury

The problem is that the studies leading to these new recommendations have been done mostly in animal models by using distinct vascular lacerations or in humans with penetrating torso injuries.[3 5 6] Studies have not fully addressed the complicated issue of polytrauma.

Polytrauma, defined as a situation entailing severe blunt trauma with injuries to multiple organ systems, entails a different pathophysiology to the more focused tissue injury and exsanguination usually resulting from critical penetrating or lacerating injuries. With or without fractures of limbs, haemopneumothoraces, lacerations of the mesenteric artery, or splenic ruptures, the massive and widespread degree of soft tissue injury creates a larger risk for systemic soft tissue inflammation, contusions, and oedema. Although generally self limited, a fracture of the femur is often associated with important soft tissue injury and can lead to noteworthy blood loss into the connective tissues with ensuing oedema. Multiple fractures of long bones can lead to shock conditions by themselves, and studies have correlated worse outcomes with patients who have a head injury and hypotension. Therefore there are many rationales for providing fluid infusions for patients with polytrauma, even for those not yet reaching definitive surgical haemostasis.

Nevertheless patients with polytrauma can also have distinct vascular injuries that are subject to some of the same concerns held for those with penetrating injuries.[7 8 9] Creation of a secondary bleed may only worsen the outcome even with severe head injuries.[5 7] Also hypotensive patients with trauma to the head may have worse outcomes, not only because the hypotension is a surrogate marker for more severe injuries but also because the traditional treatments for head injuries, both ventilatory and haemodynamic, may themselves be the cause of iatrogenic injury.[4 5 7 10] Animal models of blunt head injury now indicate that slow infusions may be preferable to rapid boluses because they may avoid disruption of soft clot formation, thus allowing formation of fibrinous clots.[5 8] Therefore future research initiatives should not only stratify patients with blunt trauma and those with severe head injury[2 9] but also the timing and rate of fluid infusions.[8]

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