occupational exposures, wherever possible, by letter or telephone to the PHLS Communicable Disease Surveillance Centre, 61 Colindale Avenue, London NW9 5EQ. Tel: 01-200 6868.

References

- 1 Dubois RM, Braithwaite MA, Mikhail JR, *et al.* Primary pneumocystis carinii and cytomegalovirus infections. *Lancet* 1981;ii:1339.
- 2 Anonymous. Needlestick transmission of HTLV-III from a patient infected in Africa [Editorial]. *Lancet* 1984;ii:1376-7.
- 3 Anonymous. CDC update on acquired immune deficiency syndrome (AIDS)—United States. *MMWR* 1982;31.
- 4 Anonymous. CDC revision of the case definition of AIDS for national reporting—United States. *MMWR* 1985;34:373-6.
- 5 McCray E. The Co-operative Needlestick Surveillance Group. Occupational risk of the acquired immune deficiency syndrome among health care workers. *N Engl J Med* 1986;314:1127-32.
- 6 Anonymous. CDC guidelines for the prevention of transmission of infection with HTLV-III/LAV in the workplace. *MMWR* 1986;35.
- 7 Gerberding JL, Hopewell PC, Kanninsky LS, Sande M. Transmission of hepatitis B without transmission of AIDS by accidental needlestick. *N Engl J Med* 1985;312:56-7.
- 8 Stricof RL, Morse DL. HTLV-III/LAV seroconversion following a deep intramuscular needlestick injury. *N Engl J Med* 1986;314:1115.
- 9 Neisson-Vernant C, Arfi S, Mathez D, Leibowitch J, Monplaisir N. Needlestick HIV seroconversion in a nurse. *Lancet* 1986;ii:814.
- 10 Oksenhendler E, Harzic M, Le Roux IM. HIV infection with seroconversion after a superficial needlestick injury to the finger. *N Engl J Med* 1986;315:582.
- 11 Bygberg IC. AIDS in a Danish surgeon (Zaire, 1976). *Lancet* 1983;ii:925.
- 12 Belani A, Dunning R, Dutta D, *et al.* AIDS in a hospital worker. *Lancet* 1984;ii:676.
- 13 Anonymous. CDC update: evaluation of HTLV-III associated infection in health care personnel—United States. *MMWR* 1985;34:575-8.
- 14 Koenig RE, Gautier T, Levy JA. Unusual intrafamilial transmission of human immunodeficiency virus. *Lancet* 1986;ii:627.
- 15 Anonymous. CDC: apparent transmission of HTLV-III/LAV from a child to a mother providing health care. *MMWR* 1986;35:76-9.
- 16 Wahn V, Kramer H, Voit T, Bruster HT, Scrampl B, Scheid A. Horizontal transmission of HIV infection between two siblings. *Lancet* 1986;ii:694.
- 17 Advisory Committee on Dangerous Pathogens. *Acquired immune deficiency syndrome (AIDS)—interim guidelines*. London: Department of Health and Social Security, December 1984.
- 18 Department of Health and Social Security. *Acquired immune deficiency syndrome. General information for doctors. Booklet 1*. London: DHSS, May 1985.
- 19 Department of Health and Social Security. *Information for doctors concerning the introduction of the HTLV-III antibody test. Booklet 2*. London: DHSS, October 1985.
- 20 Department of Health and Social Security. *Guidance for surgeons, anaesthetists, dentists and their teams in dealing with patients infected with HTLV-III. Booklet 3*. London: DHSS, April 1986.
- 21 Department of Health and Social Security. *Acquired immune deficiency syndrome (AIDS) and artificial insemination. Guidance for doctors at clinics. Booklet 4*. London: DHSS, July 1986.
- 22 Advisory Committee on Dangerous Pathogens. *LAV/HTLV-III—the causative agent of AIDS—and related conditions. Revised guidelines*. London: DHSS, June 1986.

(Accepted 15 May 1987)

Medicine and the Law

Medical malpractice in perspective

II—The implications for Britain

LOIS QUAM, PAUL FENN, ROBERT DINGWALL

Abstract

The "malpractice crisis" in the United States cannot be understood in isolation. Litigation is precipitated by features of the American health care and social security systems. Relative to the United Kingdom, there are fewer barriers of access to the courts, although the role of contingency fees has probably been exaggerated. Given the great institutional differences between the UK and the USA, the crisis seems unlikely to be replicated here unless there are further moves towards privatising both the costs of providing health care and the costs of its failures.

It is concluded that a marginal change in the frequency or average cost of claims could have a serious impact on National Health Service resources, the medical defence societies, recruitment to specialties, and clinical practice. Debate over possible reforms is compromised by the dearth of good empirical data. Any changes, however, must address both the deterrence of bad practice and the compensation of injured patients.

Introduction

A previous paper (13 June 1987, p 1529) analysed the nature of the "malpractice crisis" in American medicine and argued that this could not be understood in isolation from other social and economic changes in health care delivery in the USA. This second paper develops that analysis to ask whether the UK is experiencing or might experience the same crisis and discusses both those factors in the health care system that may precipitate claims and those in the legal system that influence their outcomes.

The health care system

The differences between the National Health Service and American health services are gross and well recognised.¹ The close relation between the cash nexus of private practice and high rates of litigation in the USA is less clearly understood.

Patients who have paid directly for their care, through a mixture of insurance premiums and contributions out of pocket, seem more likely to feel aggrieved when treatment fails.^{2 3} Moreover, litigation is fuelled by the sheer cost of extra care after an iatrogenic injury or treatment.^{4 5} Along with the immediate expense a permanently disabled patient may face continuing difficulty in obtaining insurance coverage or have to pay excess premiums. Private health insurance, or membership in a prepaid health maintenance organisation, is normally available only after a medical examination, unless offered through a workplace scheme, which requires sufficient health to hold stable employment. The only alternatives are the restrictive government schemes, Medicare and Medicaid. Thus, for example, awards are so large in alleged "brain damaged" baby cases because the sum must be sufficient to cover all relevant medical and nursing care for the child's expected lifetime.

The division of labour in medicine also seems to be implicated in the

Centre for Socio-Legal Studies, Wolfson College, Oxford OX2 6UD

LOIS QUAM, BA, research assistant

PAUL FENN, BA, BPHIL, senior research officer

ROBERT DINGWALL, MA, PHD, senior research officer

Correspondence to: Dr Dingwall.

propensity to claim. In the USA a patient is more likely to go directly to a specialist rather than obtain a referral from a general practitioner. Doctor-patient relationships are more sporadic and transient, so that patients probably feel less constrained about disrupting them by litigation. It has also been argued that specialists are more likely to use invasive procedures, with a greater risk of injury, and fail to establish rapport with patients.^{3 6} Moreover, board certified American surgeons typically perform only half the number of operations a week of surgeons in Britain.⁶ This may allow for a less hurried approach, but it may also have an adverse affect on the currency of their skills.

In principle the National Health Service seems likely to reduce claims in at least four ways: there is no direct cost to the patient for extra medical care to remedy an injury; access to care is guaranteed throughout life; there is no direct financial relation between doctors and patients; and the system of referral restrains specialists while encouraging loyalty between patients and their general practitioners. All of these are, however, vulnerable unless the level of National Health Service resources is seen to be adequate to ensure reasonable access and treatment, so that there is no need to litigate for funds to purchase care, and as long as the standards of professional discipline encourage confidence in the trustworthiness of practitioners.

The legal system

British judges have defended a conservative approach to claims against doctors by citing the need to discourage American style malpractice cases in Britain.^{7 8} Though the UK and the USA share a common legal tradition, there are important differences in the access of claimants to the courts, in their ability to assemble a worthwhile case, and in the response they are likely to meet.

Access to courts

In the USA access to legal services is facilitated by the sheer number of practising lawyers: twice as many per million population as in the UK.⁹ Medical suits can be fought on the basis of a contingency fee, but the effects of this should not be exaggerated. American lawyers who accept cases on a contingency fee basis reject about 85% of potential plaintiffs.^{10 11} Lawyers accept only claims that are supported by the law firm's medical advisers⁵ and are likely to yield sufficient damages to justify the firm's investment.¹² Patients with relatively small claims find it hard to obtain legal help from private lawyers¹² and are normally excluded from state supported legal aid programmes.¹³ In the UK contingency fees are prohibited.¹⁴ To bring a case it is generally true that all but the wealthiest litigants must seek legal aid. This requires convincing a legal aid committee that there is a reasonable case and submitting to a means test, which is likely to lead to a contribution being levied towards legal costs. Self funding litigants must accept that defeat might also entail paying most of the defendant's costs and court costs, which would be unusual in the USA.¹⁵

Assembling a case

British litigants face considerably greater difficulties than American litigants in assembling a case. Whereas American litigants have immediate access to their medical records, British litigants must make an application to the court for disclosure of the relevant documents.¹⁴ Although health authorities are now urged by the Department of Health and Social Security to disclose case notes voluntarily after consulting the clinicians concerned,¹⁶ lengthy delays may occur while the clinicians seek advice. Moreover, most patients will require legal representation to make the request for disclosure. But to obtain legal aid it is often necessary to have had access to the medical records to prove the merit of the claim.

Once a case has been initiated British plaintiffs also find it more difficult to obtain pretrial disclosure of the medical reports available to the defence.¹⁷ The courts have ruled that they ought not to order the disclosure of medical reports relating to the issue of negligence unless unusual features are present.¹⁸ This issue of disclosure, however, is under review by the Lord Chancellor. Expert evaluation of these data is also less easily accessible. In the USA there are now estimated to be 3000 doctors practising as legal consultants at fees of \$3000-\$5000 a day plus expenses.¹⁹ Relatively few British doctors are willing to accept this work for the modest rewards on offer.^{15 20}

Legal doctrine

Although there are variations from state to state, American statutes and court decisions have generally left plaintiffs in a more favourable position

than holds in the UK. In the USA there is a broader interpretation of the "standard of care" and a narrower view of what constitutes informed consent.

Formally the legal basis for determining standards of care is similar in both countries^{10 21}: that is, by reference to those standards which would be recognised as reasonably proficient by other members of the profession. In practice, however, juries in the USA seem to have been more willing to uphold claims arising from alleged errors of omission, especially failure to diagnose. Such cases are still much less likely to succeed in US courts than other allegations of negligence.²² They represent, however, a growing category of claims,²³ especially against general practitioners in the USA.²⁴

Most American states follow the British "reasonable doctor" standard for informed consent. The test applied by the court is that of what customary medical opinion would expect any doctor to tell patients with a given condition, as modified by the individual doctor's assessment of the therapeutic interests of a particular patient.²⁵ The court would intervene only if customary medical opinion restricted patients from receiving enough information to make "balanced decisions."

During the 1970s, however, a few American states adopted a "reasonable patient" test. Under this test the court determines what a reasonable patient would need to know in "deciding whether or not to forego the proposed treatment."²⁶ The court normally requires disclosure of all important material risks, any risk of death,²⁷ and any feasible alternative treatments.²⁸ Hence the onus is placed on the profession to adhere to the court's standard rather than the reverse. Although British judges have reacted coolly to this standard, as in the recent case of *Sidaway*,⁸ it is not clear that it has actually caused substantial difficulties for either the courts or the medical profession in American states.²⁹

Trial related factors

Two other features of the American legal system are also relevant: the adversarial relationship between doctors and hospitals and the role of juries in establishing civil damages.

In the UK the 1951 Ministry of Health Circular (54)32 restricted health authorities from taking legal action against any doctor who is a member of a defence society and whose treatment has formed the basis for a successful claim against the authority. Damage awards are apportioned by negotiation between the defence society and the health authority or, failing agreement, met in equal shares.¹⁴ American hospitals, on the other hand, have the right to sue defendant doctors and their insurers for the recovery of any damages awarded against them.³⁰ To maximise their chances of success American plaintiffs will normally seek to bring claims against as many potential defendants as possible. This is encouraged in some American states by the provision that awards are the collective responsibility of unsuccessful defendants, so that if one of them is uninsured or insufficiently insured the others make up that share.³¹ With multiple defendants and insurers the definition of liability can become extremely contentious and give rise to subsidiary cross litigation. It is possible that the multiplicity of non-cooperating defendants works to the benefit of the plaintiff who is seeking to establish liability.²²

The use of juries in civil cases is one of the most notorious differences between US and British courts. In the USA there is a constitutional right to a jury trial in civil cases. This practice remains in Northern Ireland, for the present, but has long been abolished in the rest of the UK except in cases of defamation.

The jury system is often cited as an explanation for high awards in the USA.^{32 33} Indeed, jurors have been shown to be aware that legal fees will amount to a substantial proportion of the sum and to calculate their verdict accordingly.³⁴ General differences in the legal and economic environment in the USA encourage greater awards of damages.

Firstly, US juries, unlike British judges,³⁵ work within a framework of statute and common law which explicitly permits the award of punitive or aggravated damages as a deterrent to negligence.³⁶ Secondly, as has been indicated, the economic loss of the malpractice victim may indeed be very large. American wage rates are higher so that loss of earnings from disability is greater. Medical bills can be substantial. There is little state welfare provision so the ability to plan for private pensions or the acquisition of necessary aids, home adaptations, or personal services may be critical to an individual's prospects. Jurors are likely to be familiar with all of these considerations when listening to legal submissions about the scale of any award.

Prospects for a crisis in Britain

It has been argued thus far that institutional factors are highly relevant in explaining differences in the claims experience of British and American medical services. High rates of claiming and litigation are likely to be

Source: Harris D, Maclean M, Genn H, et al. *Compensation and support for illness and injury*. Oxford: Oxford University Press, 1984.

The path to compensation (damages) of the whole accident sample (weighted).

intrinsic features of American style systems of welfare, health, and legal service provision. In a private system the costs of error are privately borne. Where the provision of those services is collectivised pressures to litigate are less, the financial incentives to claim are much reduced, and the possible high cost of awards diminished. To the extent that the UK moves away from public provision of health care and income support, an increasing propensity to claim larger sums must be expected.

At present there are no reliable figures for the aggregate expenditure on compensation and related legal, administrative, and professional costs in Britain. Findings of the most comprehensive study of personal injury claims in England and Wales underline the rarity of successful claims (figure).³⁷ Comparable figures are not available separately for medical negligence, but one estimate for 1983 placed the incidence of one writ per 10 formal complaints or one per 120 000 treatment episodes.³⁸ On average cases take four years to settle.³⁹ During this period some cases are dropped and some are settled, leaving between 1% and 5% to come to trial.⁴⁰ The rarity of trials reflects the preference of all the parties concerned—plaintiffs, health authorities, and defence societies—to settle early and avoid extra costs. Only 30-40% of claimants receive any compensation, compared with 86% in other personal injury cases, although injuries in medical liability tend to be more serious.⁴¹

Even a relatively small increase in claims against medical practitioners could have an appreciable effect on British health care. An increase would add to the pressure on National Health Service resources, influence recruitment to certain specialties, alter the present basis of insurance coverage, and affect clinical practice.

National Health Service resources

Health authorities, as public bodies, do not insure against tort liability claims and must meet compensation awards out of their general budget, reducing the resources available for other activities. This type of self insurance is not uncommon in the commercial world, but there the effect of increased claims may be passed on in part to the consumer. In the case of the National Health Service there is no way in which the budget can be adjusted in the short run in relation to the costs of litigation, so that the direct impact on resources available for patient care may be severe.

The present constraints on National Health Service funding may, by their

pressure on medical personnel, also precipitate an increase in the number of incidents capable of leading to claims. A study of Medical Protection Society anaesthesia claims has shown that fatigue and the strain of providing services to small hospitals and scattered emergency departments are factors in adverse outcomes.^{42 43} Fatigue is not a legal defence against an allegation of negligence. Similarly, if junior doctors take on work beyond their level of skill and experience they cannot rely on this as a defence.⁴⁴ There is only one legal standard of care: if a doctor is not sufficiently experienced to perform a particular procedure he or she should not undertake the work. Obviously, it is difficult to insist on this when faced with pressing clinical needs, but then the risk of litigation must be evaluated as a cost of a system which requires young doctors to work long hours with limited senior cover.

Insurance and recruitment to specialties

The defence societies' single subscription rate has thus far minimised any effect of the different litigation risks attached to different specialties. Proposals for differential subscription rates are presently the subject of defence societies' surveys of their members. If adopted differential subscriptions would require a sharp rise in subscription costs for consultants in high risk specialties, which would have a marked adverse effect on income, even allowing for tax deductions. The most concrete recent proposal was the Bowring insurance scheme which was rejected by the BMA annual representatives meeting in 1977. This scheme would have removed general practitioners, who were thought by proposers of the scheme to be a low risk specialty, from the insurance pool and offered them lower premiums. A substantial premium increase across all specialties would occur since the smaller insurance pool, without general practitioners, would require risk to be spread among far fewer doctors. Under the National Health Service payment system doctors would be unable to recover these costs, unless specialty related salaries were introduced. The attractions of general practice, with a lower rate of subscription fully reimbursable as a practice expense, would be further enhanced.

It has been argued that the personal cost of litigation in stress and distraction from patient care is already influencing recruitment to obstetrics.⁴⁵ The factors affecting the career choices of doctors are complex and not yet well understood.⁴⁶ This may be another manifestation of the widespread complaint about the declining attractiveness of hospital medicine and the problems of attracting junior doctors in competition with general practice. Nevertheless, concerns about the effects of litigation are worthy of serious investigation in any general discussion of recruitment problems.

Clinical practice

Our first article (13 June, p 1529) drew attention to the difficulties of isolating the effects of legal action on medical practices. Clinical decision making is influenced by many factors, including the payment system, training, work environment, peer esteem, and the physical stress or fatigue of the doctor. It is not obvious that fear of litigation is a stronger or more immediate concern than some of these. Moreover, we can reiterate here our previous view that defensive medicine is not necessarily bad medicine: practices, such as improved notetaking and record keeping, which are undertaken to avoid risk of litigation, might be seen as justifiable to the patient at risk.^{47 48}

Anxieties about defensive medicine have been most strongly voiced in obstetrics and gynaecology. It has been argued that the increasing number of

Caesarean rates for selected countries, 1970-83

	Caesarean sections (%)*							
	United States	Canada	Sweden	Scotland	Denmark	England & Wales	Norway	Netherlands
1970	5.5	6.0			4.1	4.3	2.2	2.1
1971	5.8	6.4			4.3	4.6	2.4	2.0
1972	7.0	7.2			4.6	4.9	2.5	2.2
1973	8.0	8.0	5.5		5.0	5.0	3.0	2.5
1974	9.2	9.0	6.8		6.0	5.3	3.6	2.7
1975	10.4	9.6	7.8	8.1	6.4	5.7	4.0	2.8
1976	12.1	10.8	9.6	9.3	7.1	6.3	5.0	2.9
1977	13.7	12.1	10.9	10.0	8.0	7.1	6.4	3.5
1978	15.2	13.7	11.0	10.7	9.2	7.3	7.3	3.9
1979	16.4	15.1	11.6	11.1	10.3	8.2	8.0	4.3
1980	16.5	16.1	12.0	11.5	10.5	8.8	8.3	4.7
1981	17.9		12.3	18.8		9.1	8.7	4.9
1982			12.5	12.5		10.1	9.0	5.4
1983	20.3					10.1	9.4	
1984						10.2		

^{*}These data come from several sources; some refer to the percentage of women having caesarean sections and others to the percentage of babies born by caesarean section. Source: MacFarlane A, Mugford M. An epidemic of caesareans? *Journal Maternal and Child Health* 1986;11:38-42.

caesarean sections and other interventions in labour is in part a response to the growing number of claims alleging negligent management of labour as a cause of "brain damage" in neonates.⁴⁹ But more than 10 years ago, O'Driscoll *et al* had identified "... a subtle influence in obstetrics that operates to absolve a doctor who intervenes in the course of a normal pregnancy and which, by implication exposes a colleague to censure when an infant is born dead. This places a premium on intervention as a form of personal insurance for the doctor, although the consequences are detrimental to some patients."⁵⁰

This is a specific example only of a general decision rule, first described by Scheff in 1963⁵¹: in a situation of uncertainty, prefer action to inaction if the clinical risks are comparable. The hazards of caesarean sections have diminished with advances in technology and this would be expected to be reflected in a greater willingness to use the technique in marginal cases.⁵² This is to say nothing of the possible preferences of hospitals, doctors, or patients in time management or some payment systems which make caesarean sections more profitable than vaginal deliveries.⁵³⁻⁵⁵

In one American study it was suggested that the fear of litigation was a primary causative factor in increasing the numbers of caesarean sections,⁵⁵ but this conclusion was rejected by a later NICHD consensus development conference at the National Institute of Child Health and Human Development.⁵⁶ The rise in caesarean section rates is also occurring worldwide in industrialised countries with very different health care and legal systems (table).⁵⁶ Any rise in the number of caesarean sections is also self fuelling, given the conventional wisdom, particularly in the USA, to prefer this technique for any subsequent deliveries to the same woman.⁵² Thirty per cent of the rise in the USA rate over the past decade is explained by this phenomenon alone.⁵⁷ Although it is obviously important to seek explanations for this trend, it seems unlikely that it can be put down to any single cause.

Reform

This discussion suggests that it may be premature to talk of a "malpractice crisis" in the UK. Nevertheless, there is clearly cause for serious and proper concern. Although great institutional differences exist between the UK and the USA, even a small increase in medical malpractice claims in Britain could have a great effect on the already tightly stretched resources of the National Health Service. The precise implications are difficult to establish without good data on medical malpractice claims in Britain; and there is a gap in research and health service management information.

Recently there have been expressions of support for the reform of the tort system of professional liability and its replacement by a no fault system of the kind operating in Sweden and New Zealand.²¹ Lawyers have long recognised that tort litigation is an inefficient means of compensating people for personal injuries.⁵⁸ The costs of establishing negligence regularly exceed the sums received in compensation.⁵⁹ But lawyers also recognise the deterrent objective of the system and its aspiration to discourage bad practice.⁴⁷⁻⁴⁸ Unless research and policy reforms also address the need to develop alternative and more effective methods of quality control in medical practice the profession's calls for change will risk being dismissed as self interested special pleading.

We thank Dr Iain Chalmers, Mr Joseph Smith, Professor Malcolm Symonds, Donald Harris, Pamela Watson, and Christopher Whelan for helpful comments and criticisms of an earlier draft of this paper.

This is the second of two papers.

References

- Stevens R. The evolution of the health-care systems in the United States and the United Kingdom: similarities and differences. In: *Priorities for the use of resources in medicine*. Washington DC: Fogarty International Center Proceedings, 1977:13-30. (No 40 DHEW.)
- Petersen J. Consumer's knowledge of the attitudes toward medical malpractice. In: *US Department of Health, Education and Welfare Secretary's commission on medical malpractice. Report of the commission appendix 658*. Washington DC: Government Printing Office, 1972. (DHEW publication No (os) 73-89.)
- Teff H. Consent to medical procedures: paternalism, self-determination, or therapeutic alliance. *Law Quarterly Review* 1985;101:432-53.
- Liston SL, Siegel LG. Another cause for litigation. *JAMA* 1985;253:3095.
- Somers HL. The malpractice controversy and the quality of patient care. *Milbank Mem Fund Q* 1977;55:193-232.
- McPherson K, Strong PM, Epstein A, Jones L. Regional variations in the use of common surgical procedures: within and between England and Wales, Canada and the USA. *Soc Sci Med* 1981;15A:273-88.
- Whitehouse v Jordan (1980) 1 All ER 650, 659.
- Sidaway v Bethlem Royal Hospital governors (1984) 1 All ER 1018.
- Galanter M. Mega-lawyers and mega-lawyering in the contemporary United States. In: Dingwall R, Lewis P, eds. *Sociology of the professions*. London: Macmillan, 1983:152-76.
- Dietz S, Baird B, Berul L. The medical malpractice legal system. In: *US Department of Health, Education and Welfare Secretary's commission on medical malpractice. Report of the commission appendix*. Washington DC: Government Printing Office, 1972. (DHEW (os) 73-89.)
- Smith EJ. Facts of the malpractice issue. *Lawyers Weekly* 1986;15(Mar 24):15-6.
- Danzon PM. *Contingent fees for personal injury litigation*. Santa Monica CA: Rand, 1980. (R-2458-HCFA.)
- Legal Services Commission Act of 1974 section 1007 b (1).
- Capstick B. Law in the health service: patient complaints and litigation. Birmingham: National Association of Health Authorities in England and Wales, 1986.
- Napley D. The lawyer as representative of the patient. In: Wood C, ed. *The influence of litigation on medical practice*. London: Academic Press, 1977:171-88.
- Department of Health and Social Services. *Health services management: supply of information about hospital patients in the context of civil legal proceedings*. DHSS Circular HC(82)16.
- Brahams D. Medicine and law: negligent treatment of premature infants causing retrolental fibroplasia: judge seeks pre-trial disclosure of medical reports. *Lancet* 1985;iii:589-91.
- Rahman v Kirklees Area Health Authority (1980) 1 WLR 1244.
- Halley M. Medical malpractice—1985. *J Kans Med Soc* 1984;85:323-9.
- Brahams D. Doctors and the courts. *Lancet* 1984;ii:1050.
- Smith RJ. When things go wrong. *Br Med J* 1986;293:461-2.
- Danzon PM, Lillard L. *The resolution of medical malpractice claims*. Santa Monica CA: Rand, 1982. (R-2792-ICJ.)
- Brenner LH, Jessesse WF. Delays in diagnosis: a problem for quality assurance. *QRB* 1983;Nov:337-44.
- Rasmussen H. Medical practice and professional liability—problems and trends in twelve specialties: American Academy of Family Practice. *Proceedings of the council of medical specialty societies national conference on professional liability*. Chicago: Council of Medical Specialty Societies, 1984:54-9.
- Karp v Cooley 349 F. Supp 827 (SD Tex 1972) aff'd 493 F 2d 408 (5th Cir 1974).
- Canterbury v Spence 464 F 2d 772, 783-84 (DC Cir 1972) cert denied. 409 US 1064 (1972).
- Cobbs v Grant 8 Cal 3d 229, 244, 502 P 2d 104 Cal. Rptr 505,515 (1972).
- Contereras v St Lukes Hospital, 78 Cal. App 3d 919 144 Cal Rptr 647. (Cal Ct App 1978.)
- Annas GJ. Why the British courts rejected the American doctrine of informed consent. *American Journal of Public Law* 1984;74:1286-8.
- Wolfe v Ford Motor Company, 434 NE 2d 1008 (1982).
- St Paul Fire and Marine Insurance Company. *Malpractice insurance requirements for hospital staff members*. St Paul MN: The St Paul, 1984.
- Toulmin JK. Major current problems as seen by the lawyer. In: Wood C, ed. *The influence of litigation on medical practice*. London: Academic Press, 1977:82-94.
- Cameron CTM. Some aspects of the US medical malpractice insurance crisis. *Br Med J* 1977;iii:877-80.
- Selvin M, Picus L. *The debate over jury performance: observations from a recent asbestos case*. Santa Monica CA: Rand. (R-2792-ICJ.) (in press.)
- Kralj v McGrath. *The Times* 1985 June 17.
- King JH. *The law of medical malpractice in a nutshell*. St Paul: West, 1986.
- Harris D, Maclean M, Genn H, et al. *Compensation and support for illness and injury*. Oxford: Oxford University Press, 1984.
- Anonymous. Notes and news: patient litigation. *Lancet* 1986;ii:168.
- Medical Protection Society. *Subscription rates for 1987*. London: Medical Protection Society, 1986.
- Brahams D. In negligent actions against doctors: no blame means no compensation. *Lancet* 1983;ii:1231.
- Royal Commission on Civil Liability and Compensation for Personal Injury. *Report*. London: HMSO, 1978. (Cmd 7054.)
- Green RA, Taylor TL. An analysis of anesthesia medical liability claims in the United Kingdom, 1977-1982. *Int Anesthesiol Clin* 1984;22:73-89.
- Green RA. A matter of vigilance [Editorial]. *Anaesthesia* 1986;41:129-30.
- Wilsher v Essex Area Health Authority. *The Times* 1986 Aug 6.
- Symonds EM. Litigation in obstetrics and gynaecology. *Br J Obstet Gynaecol* 1985;92:433-6.
- Johnson M. Professional careers and biographies. In: Dingwall R, Lewis P, eds. *Sociology of the professions*. London: Macmillan, 1983:242-62.
- Reder MW. Medical malpractice: an economist's view. *American Bar Foundation Research Journal* 1976;1976:511-63.
- Schwartz WA, Komisar NK. Doctors, damages and deterrence: an economic view of medical malpractice. *N Engl J Med* 1978;298:1282-9.
- Chalmers I. Trends and variations in the use of caesarean delivery. In: Clinch J, ed. *Perinatal medicine. Proceedings of the IX European congress of perinatal medicine*. Lancaster: MTP, 1985:145-9.
- O'Driscoll K, Carroll CJ, Coughlan M. Selective induction of labour. *Br Med J* 1975;iv:727-9.
- Scheff T. Decision rules, types of error and their consequences in medical diagnosis. *Behav Sci* 1963;8:97-107.
- Taffel SM, Placek PJ. Complications in cesarian and non-cesarian deliveries: United States 1980. *Am J Public Health* 1983;73:856-61.
- Graham AR. Trial labor following previous cesarian section. *Am J Obstet Gynecol* 1984;149:35-8.
- Hindle WH. Round table discussion: cesarian section. *Am J Obstet Gynecol* 1984;149:38-45.
- Marieskind HI. *An evaluation of cesarian section in the United States*. Washington DC: Department of Health, Education, and Welfare, 1979.
- National Institute of Child Health and Human Development. *Cesarean childbirth: report of a consensus development conference*. Bethesda MD: NICHD, 1981.
- Phelan JP. Vaginal delivery after previous cesarian section. *West J Med* 1986;144:69-70.
- O'Connell J. Ending insult to injury. Urbana IL: University of Illinois, 1975.
- Lord Chancellor's Department. *Civil Justice review: personal injuries litigation*. London: Lord Chancellor's Department, 1986.

(Accepted 10 March 1987)