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Medicolegal issues for the respiratory paediatrician

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ABSTRACT

The legal profession depends on expert witnesses, and indeed the first time an English Court relied on an expert medical witness was in the 14th century. Asking a specialist to comment on the standard of professional practice expected in their own specialty was first introduced in a 1767 case [1]. This article draws on 20 years of experience in medicolegal work relating to paediatric respiratory medicine. It highlights some of the legal principles that lie behind an expert opinion and what constitutes clinical negligence. It aims to set out lessons for medicolegal experts and clinicians, but also offers some advice to lawyers and parents. Finally, it illustrates some issues that arise more commonly in paediatric respiratory practice.

Introduction

It is a fact that people make mistakes, but when it happens in a medical context and involves a sick child, the consequences can be serious and far-reaching. Often it is a series of small mishaps and circumstances that come together; at any stage the chain of events may be broken but if not a disaster may follow. Of course occasionally it is due to laziness, ineptitude or arrogance by the healthcare professional concerned. Often it is simply a matter of bad luck or 'fate', and sadly something goes wrong or a child becomes seriously ill, but it is genuinely no-one's fault. In the UK, estimates in 2000 suggested that adverse events causing harm occur in 10% of hospital admissions [2], which were similar to contemporaneous figures in the US [3].

The old teachings of 'never admit anything', so prevalent up to the late 1970s, have fortunately disappeared. An explanation and apology is often all the patient or their family want, and the principles of Duty of Candour introduced into the UK in 2014 are commendable [4]. Scotland has passed an act - Apologies (Scotland) Act 2016 – that came into force in June 2017, whereby doctors apologising to patients have legal protection, and an apology outside legal proceedings is not an admission of liability [5]. Nevertheless, people have become increasingly litigious and doctors were knocked off their pedestals many years ago. There has been a significant increase in claims of medical negligence, although it has fallen by 10% in the last 3 years in England [6]. Nevertheless NHS Resolution, formerly known as the NHS Litigation Authority (NHSLA), that deals with NHS hospitals in England, received almost 11,000 new clinical negligence claims for the year bridging 2016/17 [6]. Of the 17,338 claims resolved in that year, 9,675 (56%) resulted in payment of damages; the total paid out reached a staggering £1.7 billion (compared to £583 m in 2008) [6]. The £1.7 billion included £624 million in legal costs which was over a third of the total payments. The advent of law firms offering conditional fee arrangements ('no win no fee') to potential claimants is likely to have contributed to the large number of claims and encouraged a compensation culture [7]. However since 2013, success fees are no longer recoverable from the defendants but come out of the damages awarded to the claimant, albeit they are capped at 25% of the damages, and smaller claims (less than £100,000) are no longer of such interest to law firms [8].

Legal principles

Clinical negligence is a legal term for a medical accident where a patient has not received care to a proper standard, and where that substandard care has also caused the patient a physical injury. So it is not enough to prove negligence *i.e.*, breach of duty, there also has to be causation, namely proof of harm that has resulted directly from that breach. Even if the standard of medical care was extremely poor, if it did not result in a significant consequence, there is likely to be no legal case. The law views clinical negligence as a failure on the part of the doctor or treating institution to reach the accepted standard of medicine. So sometimes the claim does not proceed, as despite the patient or parents' perception, nobody actually did anything negligent. Many times, cases settle out of Court at a late stage, often the day before the case is

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due to be heard, and this results in unnecessary legal expenses and wasted time for the experts who will have cleared their diary for several days. In England, NHSLA data (1997–2008) show that only 4% of claims were actually settled in Court, 43% were settled out of Court, and 40% abandoned by the claimant [9]. Similarly, in a US series of over 4000 malpractice payments, 95% were settled outside Court [10]. Latest NHS Resolution figures for 2016/17 showed less than 1% cases of cases settled that year took place in Court, with 40% cases resulting in damages paid out [6].

Certainty and the expert

The standard of proof in a civil case is different from a criminal case where 'beyond reasonable doubt' is what a jury works with in most countries. This is fortunate for medical experts, as so many cases cannot be decided with certainty. The term often used by lawyers in the US is 'reasonable medical probability' or 'reasonable medical certainty'; meaning is the result more probable than not [1]? This translates into UK courts as the 'balance of probability', whereby the expert only has to believe that there is a 51% probability that a particular outcome resulted from a particular action (or more often a lack of action). The claimant has to prove on the balance of probabilities that the negligent act either caused or contributed to the alleged damage. In a UK Coroner's Court, the certainty level is different, whereby a conduct will be considered to have caused the death if it 'more than minimally, negligibly or trivially contributed to the death' [11].

Paediatricians and clinical negligence

Paediatricians are generally less often the subject of a claim, and data from the USA (from 1991–2005) showed that each year 3.1% of paediatricians were facing a malpractice suit *vs* 7.4% of adult physicians [12]. In fact paediatricians ranked lowest of all specialists apart from psychiatrists (neurosurgeons and cardiothoracic surgeons were the highest) [12]. Furthermore, another large 20 year series (1985–2005) that encompassed 25% of all US claims, showed that 3% of the claims were against paediatricians [13].

Despite the relatively low number, compensation paid out from paediatric claims is amongst the highest, especially in cases of permanent injury [14], because the compensation may have to cover a greater period of care or loss of earnings. One US study (2004–2005) found paediatric claims accounted for 14% of over 30,000 malpractice payments made [10]. Legal costs in the US for defending paediatric claims seemed particularly high, with paediatricians being subject to fourth highest mean costs out of 28 specialties [13]. Further US data from 2004–2005 have shown the causes behind over 4,000 compensation payments from paediatricians were as follows: failure to diagnose (18%), improper performance (9%), delay in diagnosis (9%), and improper management (6%) [10].

Respiratory paediatrics and clinical negligence

Figures are not available specific to respiratory paediatricians, but there are some that relate to individual conditions. A systematic review looking at 6 studies published before 2007, all from the US, found pneumonia was the third commonest diagnosis involved in claims for children under 2 years of age, most often occurring in the Emergency Dept. [15]. Studying US cases from 1985–2006, included in the top ten medical conditions resulting in malpractice claims (with brain-damaged infant highest), 4th was respiratory problems in the newborn, 6th was pneumonia and 10th was asthma [16]. In a French series (the first non US data available) of malpractice claims for children over one month old (2003–2007), almost half the cases were related to misdiagnosis, and pneumonia was the third commonest condition misdiagnosed accounting for 9% of the cases [17]. Data in the UK covering 2005–2010 showed that delayed or failed diagnosis of a respiratory infection accounted for 1.5% of incidents leading to successful litigation [18].

The consequences of missing a pneumonia diagnosis may be critical, as in a review of over 2000 Emergency Dept. claims (1985–2000), cases in which the child died were most often from meningitis or pneumonia [19]. The French series found that missed diagnoses of pneumonia had a 50% fatality rate, whilst the rate for asthma was 66% [17]. However in a UK series (2004–2011) of successful litigation cases after a childhood fatality, pneumonia was not found as a single cause of death in the 77 cases arising from delayed/failed diagnosis or delayed/failed treatment, which is somewhat surprising [20].

Mediation

Mediation is a key part of Alternative Dispute Resolution (ADR), a mechanism of avoiding Court whereby the two parties try to settle their dispute, usually with their lawyers present, in front of a qualified mediator. Following the Lord Woolf 1995 reforms, it is the duty of the Court to encourage its use, and following pre-action protocols sometimes a Judge will order the parties to attempt mediation before a case is heard. It can often be successful in the hands of a skilled mediator [21], especially as families often just want an apology from the doctor or hospital. Doctors can train to become mediators but a potential problem is that some families might then perceive the mediator to be biased, assuming they will support the medical establishment and take sides with the defendant. Unfortunately, for a number of reasons, mediation is underutilised in the UK [22].

Lessons for medicolegal experts

- Most legal systems will have rules governing how experts present their opinions, both as a written report and orally in Court. In the UK these rules for experts and assessors are defined by the Ministry of Justice in Part 35 of the Civil Procedure Rules [23], which are further clarified in Practice Direction 35 [24]; these were last updated in January 2017. Experts must be familiar with these rules and comply with them; and their report must contain a statement indicating this.
- The Court may instruct that a single expert is jointly appointed by both sides, and if there are two experts, may order them to hold a discussion to see if they can come to an agreed opinion. Further information is provided in the Guidance of the instruction of experts in civil claims from the Civil Justice Council, published in August 2014 [25].
- Experts can only give an opinion on something relating to their own area of expertise and most would wish to comply with that anyway. However it does mean they cannot comment on something done by a doctor in a different specialty. It is reasonable that only a GP should say what another GP would have been expected to do in a particular situation (rather than a specialist). I have been criticised by a barrister for saying that since the GP did not record the respiratory rate one must assume it was not measured, and was told that since I was not a GP, I did not have the right to make that comment. Whilst I believe some issues of clinical practice are common to all doctors, lawyers would say that I am not an expert on the sort of records made by GPs, especially of normal findings. So even if they should record a negative finding (which would prove it was measured in the first place), if most GPs do not, then they cannot be criticised.
- It seems many judges, jurors and lawyers perceive experts to be biased [1]. Remember you do not represent any 'side'

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(complainant or defendant) in the case, your overriding duty is to the Court and not the lawyers nor their client. Being independent means that you represent yourself, and it is your opinion. If you meet the child and their parents, it is important to stress this to them, you are not a 'hired gun' expert witness. Resist any pressure (direct or subtle) to alter your report to suit their case.
- Read the notes carefully; many experts prefer paper copies that can be bookmarked, but many legal firms prefer to send the notes electronically, so insist on paper if that is how you work best.
- For issues that occurred on an in-patient, the nursing notes often provide vital clues as they are usually much more detailed than those written by doctors.
- Do not use out of date references, *e.g.* an old textbook, unless you are seeking to describe the state of knowledge at the time. Updated guidelines, relevant peer reviewed papers, and systematic reviews are better. Do remember though that a guideline contemporaneous to the case is the version that should be used. A clinician cannot be criticised if practice changed after the date of the incident.
- Evidence based guidelines play an important role and are the legal standard in Holland and France [1]. How sacrosanct the guidelines are varies in different countries, and is argued about in different cases. Certainly a deviation from an established national evidence-based guideline would need to be justified by a defendant [1], and in England guidelines are often dispositive.

Some advice for those contemplating taking on medicolegal work

- At the outset, it is worthwhile attending a course on how to write reports, and what to expect if attending Court.
- Only take on a case in which you are truly an expert, even if it falls within your specialty do not become involved if you do not have total confidence in your understanding and experience with the condition.
- Do not be tempted to make remarks on issues that fall outside your specialty, lawyers often ask extra questions to which the answer can only be that this falls outside your expertise and they need to consult someone else.
- Ensure there is no conflict of interest, in small specialties many of the clinicians know each other. I have been accused by a parent, angry that I had said I did not believe there was a case to answer, of being part of a cover up and in collusion with the doctor he believed was negligent.
- Beware of too much hindsight, try and put yourself in the position of the clinician making a decision at the time of the incident.
- When writing reports, keep them concise, avoid technical language (unless clarified), number all the paragraphs and pages, and make sure you proof read it carefully. Do not forget to sign and date the report.
- Stick to the timetable and deliver reports on time.

Lessons for clinicians

There are a few principles that should help clinicians avoid errors

- Attention to detail is everything, in particular taking a very careful history. It is important to spend enough time with the patient, as it is when someone is particularly rushed in clinic that they are likely to miss something.
- Do not be dismissive of the parents' concerns, or simply label them as 'neurotic'. The doctor who dismisses the concern of a mother who is the real expert on how her child normally behaves and is best placed to spot when things are wrong is taking a great risk. At the same time, the physician must remain open-minded, and retain a level of healthy scepticism, so important for spotting the child with fabricated or induced illness (FII). Take particular care when the clinical picture does not seem right or is not physiologically feasible [26].
- Examine the child properly, this seems so obvious, but it is often the conclusion of a legal case that a proper examination did not take place, when important symptoms were missed or not looked for. The classic example is no measurement of the respiratory rate thus missing tachypnoea. Document negative or normal findings, as that proves they were considered and looked for. Furthermore, age specific vital signs and the effect of a fever are often overlooked [9].
- If you are not sure what to do – seek help from a senior or other colleague. Make appropriate referrals to other specialists when the problem falls outside your area of expertise.
- Write comprehensive notes. It is still an adage that if it was not written down at the time, it did not occur. Truthfully, if someone measured the respiratory rate they are going to record that, and protests that "I always measure the rate" will count for nothing in Court. Also be aware not to miss entries on electronic patient records.
- It is essential to record your impression of the child, whether they appear ill, pale, sleepy, subdued or irritable. These are factors that an expert will know played a vital part in the formulation of your opinion, but if they are not recorded they cannot be taken into account, against a detailed version given by a parent who will have replayed the events over and over.
- Record clear discharge plans and advice given to parents. Particularly record what the parents have been told about when to seek medical help again, and what 'red flags' they were given. There is a massive difference between "bring him back tomorrow if he does not get better", "bring him back tomorrow if he gets worse" and "don't be afraid to bring him back any time if you are worried."
- If asked to see a colleague's child, resist the pressure to do a corridor consultation. Insist on seeing them formally in clinic and write proper clinical notes as you would with any other patient.
- If something does go wrong, be honest, ensure the Duty of Candour is discharged and when appropriate apologise. Remember and act on the assumption that the parent and the doctor are on the same side in wanting to do the best for the child. This partnership need not break down after an adverse event, even when a member of the team has done something wrong. Many parents only take legal action when they feel the doctor was arrogant or dismissive, did not apologise, and seems to be part of what they perceive as a cover up. Even after the event, parents often want only to ensure the same mistake does not happen to another child.

Lessons for lawyers

- Consider mediation, the result are often more satisfactory for the client and cheaper for the Health Services.
- Much of medicine is not black and white, many decisions fall into a grey area, so you cannot expect experts to always be able to give a definitive yes/no answer.
- Beware of the professional expert witness.
- Do not try and influence the expert's views.
- Allow a reasonable timetable for busy clinicians; remember most experts usually have a full time clinical job.
- Most experienced experts are not yet comfortable working from notes delivered in a digital format, you will need to continue to offer printed notes in folders. These notes should be in chrono-

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logical order and paginated. There is also no point in providing illegible photocopies.

Lessons for parents

- Do not blindly trust doctors, go by your own instinct if you are certain your child is unwell, you know them best. But try to explain why you think your child is ill.
- Seek another opinion if necessary, from another GP or the nearest Accident & Emergency department. Do not be afraid of asking for a second opinion in hospital if you do not think your doctor is getting it right.
- Beware the ready diagnosis of a viral illness for a child who continues to be unwell. Try to give an accurate history of when the patient started to be unwell. Do not be afraid to make your own record of how your child is, especially when they are at home.
- You are your child's advocate, do not be intimidated by the medical/nursing profession, ask questions and ensure you get a satisfactory answer.
- Ask the doctor for the warning signs so you know when to return if your child is not improving.
- Be particularly wary if the doctor has not even examined your child.
- Be even more wary around the Christmas/New Year holidays, there is a disproportionate number of serious cases that occur at that time of the year. Also the first weeks of February and August when junior doctors tend to change jobs is a challenging time.

Case examples

Cases requiring a paediatric respiratory report are quite varied. Generally though they fall into the following categories, and some examples are given.

Failure to diagnose – delayed, missed, wrong

This is not uncommon in children with cystic fibrosis (although should reduce with newborn screening); examples include misinterpreting sweat test results, ignoring rectal prolapse, failing to act on signs of steatorrhoea and 'chestiness'. One of the difficulties in these cases is predicting reduction in life expectancy due to the delay in diagnosis, something the Court will expect to be told.

Another common case is delayed diagnosis of pneumonia that leads to an empyema. This can be difficult because empyema often presents in children already receiving intravenous antibiotics for their pneumonia, so causation may be difficult to prove. Another issue is when thoracic surgery is claimed to be the consequence of the late diagnosis, as not all centres would operate in the first place, most use chest drains with intrapleural fibrinolytics. Missed diagnoses of pneumonia also sadly end up in the Coroner's Court; sometimes the result of simply not examining the child properly. Measuring the respiratory rate is vital and often omitted, tachypnoea is used all over the world especially in developing countries as a pointer to acute respiratory illness. Failure to recognise chest pain in a young child as potentially pathological also led to a Coroner's case with missed severe pneumonia. Missing a large pleural effusion also happens (many doctors do not percuss the chest), and the timing is critical as one is asked to say what would the likely examination findings have shown at the time if done properly, bearing in mind what is subsequently known. There have also been cases of missed diagnoses underlying recurrent pneumonia *e.g.* aspiration with an unsafe swallow, bronchogenic cyst.

Missing abnormalities on chest radiographs is also common; the importance of radiologists reporting X-rays taken in an Accident & Emergency department (A&E) that are often only looked at by inexperienced doctors, cannot be stressed enough. A useful report must be done in a timely fashion (and the report seen by the clinician). Examples that have been followed by disasters include missed pleural effusions, missed left lower lobe pneumonia changes behind the heart shadow, failure to recognise chronic atelectasis of the left lower lobe, missed foreign bodies, missed congenital diaphragmatic hernia.

Failure to recognise severity

There are many cases where the diagnosis is not in doubt but an inadequate assessment or appreciation of the clinical status may lead to children being sent home from A&E with disastrous consequences, for example children with asthma or infants with bronchiolitis. Failure to recognise the severity of an acute asthma exacerbation on in-patients is another issue, I reviewed two cases of children who clearly needed their treatment escalated to intravenous therapy; one had a cardiorespiratory arrest with severe neurological consequences, one had an arrest and died having already been in hospital for 6 h. The diagnosis was recorded but the severity was over-looked. In a case in a GP surgery, the patient needed to go to A&E, having not responded to their usual bronchodilators via a spacer device, but did not receive a nebulised bronchodilator before leaving the surgery, and died in the parent's car on the way to hospital. Where an ambulance was not given the correct priority rating because the Control Room did not ask the right questions, the paramedics arrived just after the child had collapsed and died from their asthma.

Poor management

All sorts of poor management occur in hospital because the organisations are complex and the patients and parents vary in their perception of the illness. Whilst many suboptimal events do not count as clinically negligent, some are just bad practice. An example was an infant with bronchiolitis who died on a ward with no nursing observations made and no oxygen saturations measured. The staff may have been hard-pressed and they may have got away with it for years, but it is unlikely to be defensible. Or a case where, although the child had a rare case of bacterial tracheitis that was not recognised by the GP, the reason the child died was that the doctor in A&E failed to recognise the child was in septic shock, and proper fluid resuscitation did not happen. Another example is a child with cystic fibrosis who developed renal failure after aminoglycoside levels were not checked during a course of home intravenous antibiotics. It is unlikely to be defensible if disaster is caused by the omission of monitoring that would be seen as mandatory for the same therapy in another context.

Medical mishaps

Many routine therapeutic interventions are themselves intrinsically dangerous and where damage is caused as a result of an iatrogenic mistake it is unlikely to be defensible and may be classified as a never event. Well-recognised cases include aspiration pneumonia from a misplaced nasogastric tube with milk fed into the airways; or percutaneously inserted central catheters placed improperly leading to total parenteral nutrition, and in another case vincristine and blood infused into the pleural cavity. Where the initial mishap is a recognised potential complication of the procedure, it may be the failure to recognise the problem that leads to catastrophic complications. Where rocuronium (a neuromuscular blocker) was left in a peripheral cannula, the subsequent flushing on the ward led to a respiratory arrest: this is a classic error in operating departments illustrating the importance of not leaving tasks to be completed by another team, after the patient has been transferred.

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Accidents

These will always be a feature of paediatric practice, but many are not the fault of the children. Examples include the consequences of near drownings and road accidents; fairly common cases of chronic carbon monoxide poisoning, due to faulty gas boilers or ventilation systems; an unusual case of contamination of a hospital's oxygen piping leading to several babies in a neonatal unit becoming unwell; and recently in Australia misdirected gases were delivered via incorrectly labelled wall outlets in a renovated delivery suite that led to hypoxic brain damage in two infants.

Reports on causation

Sometimes a breach of duty has been admitted, but causation is disputed. An example was the consequences of mistiming of a Caesarean Section done at 37 weeks gestation (the obstetrician had miscalculated and thought it was at 39 weeks); the child developed significant respiratory distress syndrome and subsequent asthma – was the respiratory distress the result of 37 week delivery and was the asthma the result of that? Circumstantial evidence such as atopic status of the child or family history can help determine whether the child was likely to have developed asthma anyway, fortunately the opinion was based on balance of probability rather than 100% certainty.

Reports on prognosis

There are frequent cases of children with cerebral palsy, usually due to hypoxic ischaemic encephalopathy, in which the expert is asked what contribution the respiratory status makes to the overall prognosis of the child, provided by a neurologist. The starting point is usually determined using the Strauss data from California that provide life tables for people with cerebral palsy [27,28]. The respiratory contribution is then determined by assessing how different the child's respiratory status is from other children with cerebral palsy, given many of the children used to determine the life tables will also aspirate due to an unsafe swallow, have gastro-oesophageal reflux, poor posture and scoliosis, and often a poor cough and gag reflex.

Reports on damp housing

There are also frequent cases where parents take action against landlords, or more usually the Council, over damp conditions in the home usually with mould on the walls; sometimes it is due to condensation build up rather than actual rising damp. The children often have frequent colds and may have asthma. There may be an association with worsening of symptoms, but it is difficult to prove that the housing conditions caused the child to have asthma in the first place [29,30].

Conclusions

Mistakes happen, sometimes due to negligence, and this often results in litigation. Lawyers rely on medical experts in these cases, and medicolegal work can be fascinating, although often very sad when reviewing how a child suffered severe harm or died unnecessarily.

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References

[1] Johnston JC, Sartwelle TP. The expert witness in medical malpractice litigation: through the looking glass. J Child Neurol 2013;28:484–501.
[2] Dept. Health. An organisation with a memory. Report of an expert group on learning from adverse events. London: Stationery Office; 2000. https://www.aagbi.org/sites/default/files/An%20organisation%20with%20a%20memory.pdf. Accessed 18.4.17.
[3] Kohn LT, Corrigan JM, Donaldson MS. 1999. To err is human: building a safer health care system. Committee on Quality of Health Care in America. Institute of Medicine. http://www.nationalacademies.org/hmd/~/media/Files/Report%20Files/1999/To-Err-is-Human/To%20Err%20is%20Human%201999%20%20report%20brief.pdf. Accessed 19.4.17.
[4] Care Quality Commission. Health and Social Care Act 2008 (Regulated Activities). Regulations 2014: Regulation 20 Duty of Candour. http://www.cqc.org.uk/content/regulation-20-duty-candour#full-regulation. Accessed 18.6.17.
[5] The Scottish parliament. Apologies (Scotland) Bill. http://www.parliament.scot/parliamentarybusiness/Bills/86984.aspx. Accessed 18.6.17.
[6] NHS Resolution. Annual report and accounts 2016/17. http://resolution.nhs.uk/wp-content/uploads/2017/07/NHS-Resolution-Annual-report-and-accounts-2016_17.pdf. Accessed 28.7.17.
[7] Simon E. End of 'no win, no fee' lawsuits. The Telegraph 2013. http://www.telegraph.co.uk/finance/personalfinance/money-saving-tips/9959646/End-of-no-win-no-fee-lawsuits.html. Accessed 16.6.17.
[8] Taddia M. Medical negligence lawyers face a gloomy prognosis. The Law Society Gazette; 2013. https://www.lawgazette.co.uk/practice/medical-negligence-lawyers-face-gloomy-prognosis/5039011.article. Accessed 16.6.17.
[9] Marcovitch H. When are paediatricians negligent? Arch Dis Child 2011;96:117–20.
[10] Kain ZN, Caldwell-Andrews AA. What pediatricians should know about child-related malpractice payments in the United States. Pediatrics 2006;118:464–8.
[11] Inquest Book. The law of coroners and inquests. In: Cross C, Garnham N, editors. Oxford UK: Hart Publishing; 2016.
[12] Jena AB, Seabury S, Lakdawalla D, Chandra A. Malpractice risk according to physician specialty. N Engl J Med 2011;365:629–36.
[13] Carroll AE, Buddenbaum JL. Malpractice claims involving pediatricians: epidemiology and etiology. Pediatrics 2007;120:10–7.
[14] Jena AB, Chandra A, Seabury SA. Malpractice risk among US pediatricians. Pediatrics 2013;131:1148–54.
[15] Najaf-Zadeh A, Dubos F, Aurel M, Martinot A. Epidemiology of malpractice lawsuits in paediatrics. Acta Paediatr 2008;97:1486–91.
[16] McAbee GN, Donn SM, Mendelson RA, McDonnell WM, Gonzalez JL, Ake JK. Medical diagnoses commonly associated with pediatric malpractice lawsuits in the United States. Pediatrics 2008;122:e1282–6.
[17] Najaf-Zadeh A, Dubos F, Pruvost I, Bons-Letouzey C, Amalberti R, Martinot A. Epidemiology and aetiology of paediatric malpractice claims in France. Arch Dis Child 2011;96:127–30.
[18] Raine JE. An analysis of successful litigation claims in children in England. Arch Dis Child 2011;96:838–40.
[19] Selbst SM, Friedman MJ, Singh SB. Epidemiology and etiology of malpractice lawsuits involving children in US emergency departments and urgent care centers. Pediatr Emerg Care 2005;21:165–9.
[20] Sen G, Keene J, Raine J. An analysis of successful litigation claims in childhood fatalities in England. Eur J Pediatr 2012;171:1657–60.
[21] Clinical Disputes Forum Guide to Mediating Clinical Negligence Claims.V1.07.ii. July 2001. https://www.cedr.com/library/articles/cdf_guide.pdf. Accessed 19.4.17.
[22] Peysner J, Seneviratne M. The management of civil cases: the courts and post-Woolf landscape. Department for Constitutional Affairs. DCA Research Series 9/05; 2005. http://217.35.77.12/CB/england/research/pdfs/2005/9_2005_full.pdf. Accessed 16.6.17.
[23] Part 35. Experts and assessors – Civil Procedure Rules. Ministry of Justice. https://www.justice.gov.uk/courts/procedure-rules/civil/rules/part35. Accessed 18.4.17.
[24] Practice Direction 35 – experts and assessors. Ministry of Justice. http://www.justice.gov.uk/courts/procedure-rules/civil/rules/part35/pd_part35. Accessed 18.4.17.
[25] Guidance for the instruction of experts in civil claims. August 2014. Civil Justice Council. https://www.judiciary.gov.uk/wp-content/uploads/2014/08/experts-guidance-cjc-aug-2014-amended-dec-8.pdf. Accessed 18.4.17.
[26] Royal College of Paediatrics & Child Health 2009 (reviewed 2012). Fabricated or induced illness by carers (FII): a practical guide for paediatricians. http://www.rcpch.ac.uk/system/files/protected/page/Fabricated%20or%20Induced%20Illness%20by%20Carers%20A%20Practical%20Guide%20for%20Paediatricians%202009.pdf. Accessed 16.6.17.
[27] Brooks JC, Strauss DJ, Shavelle RM, Tran LM, Rosenbloom L, Wu YW. Recent trends in cerebral palsy survival. Part I: period and cohort effects. Dev Med Child Neurol 2014;56:1059–64.
[28] Brooks JC, Strauss DJ, Shavelle RM, Tran LM, Rosenbloom L, Wu YW. Recent trends in cerebral palsy survival. Part II: individual survival prognosis. Dev Med Child Neurol 2014;56:1065–71.
[29] Heinrich J. Influence of indoor factors in dwellings on the development of childhood asthma. Int J Hyg Environ Health 2011;214:1–25.
[30] Tischer CG, Hohmann C, Thiering E, Herbarth O, Müller A, Henderson J, et al. ENRIECO consortium. Meta-analysis of mould and dampness exposure on asthma and allergy in eight European birth cohorts: an ENRIECO initiative. Allergy 2011;66:1570–9.

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