

## Limitations of expert evidence

Doctors from diverse specialties are required, from time to time, to give evidence either in documentary form or in person to both civil and criminal courts. A joint conference of the Royal Colleges of Physicians and Pathologists was held at the Royal College of Physicians on 25 October 1994, with the intention to explore those areas where difficulties might arise for the doctor from either a medical or a legal point of view, both as an informative exercise and in order to identify subjects which might usefully be further examined.

**Judge Martin Stephens QC** (Cardiff) presented a lawyer's overview of the status of the expert witness in the criminal court. He emphasised that many cases can be resolved on evidence of fact, rendering unnecessary the services of an expert witness; there are also cases where the difficulties raised through over-elaboration of a subject by a scientific witness could complicate, rather than clarify, an issue. He outlined the basic requirements in terms of field of practice and experience that a witness should possess in order to be considered competent, and considered what materials the expert would be required to draw upon. Careful preparation of reports is important because a major, if infrequent, difficulty with expert testimony arises when the witness fails to repeat in the witness box what has been stated in reports or expounded in conference with counsel. Experts should not be tempted to 'try a case' by giving opinions on matters that are for the judge and jury to decide, even though it could be difficult on occasions to give an opinion distanced from an overall judgment; there are occasions when the medical witness is required to give such an opinion: for example, in determining fitness to plead or opining as to the reliability of confession evidence.

**Ms J Cummin** (Nabarro Nathanson, London) emphasised that expert evidence was a central issue in civil litigation, and liable to 'make or break' a case. She drew attention to the need for impartiality on behalf of the experts concerned and outlined the standard of proof required. Ms Cummin described the role of the medical expert in proving liability and causation and gave an outline of proceedings, starting from the 'letter before action' and extending through to trial and 'assessment of quantum of damages'. Practitioners were warned not to include anything in a report that they would not willingly back up in court and to limit their opinions to the terms of reference supplied. An overview of the ideal contents and layout of a report was produced with emphasis on a detailed factual basis prior to interpretation and opinion. Counsel has the right to amend or redraft a report as long as it still rep-

resents the views of the expert concerned, but some concern was expressed from the floor on this point. Again, experts were warned against giving judgments and also against raising 'new' issues which should have, and could have, been raised in the original report. While conceding that the present adversarial system could be accused of having a potential for bias, Ms Cummin saw no prospect of imminent change but drew attention to the potential use of 'court experts'.

**Dr P J Lincoln** (London Hospital Medical College) and **Mr G Cooke** (Barrister) described the development of DNA identification techniques, explaining how the population incidence of DNA fragments of specific sizes has been developed from a database of previous analyses. Their use in corroborating identity is principally limited by the variability of DNA fragment size estimation, which may lead to an error margin of as much as  $\pm 5\%$ , and by differing 'DNA profiles' in different ethnic groups. Techniques apparently vary from laboratory to laboratory, which might also utilise different databases. These problems can, to an extent, be circumvented by using a greater number of DNA probes, but this appears to be complicated by the occasional occurrence of aberrant results. Concern was expressed regarding the standard of statistical analyses currently employed and equally how such evidence was presented in court, both by expert witnesses and by counsel; this latter was epitomised as the 'prosecutor's fallacy' or mis-statement to the jury.

**Dr R Evans** (Accident & Emergency, Royal Infirmary, Cardiff) reviewed common causes of medical litigation and advocated a cautious approach to drafting reports, bearing in mind the need to 'stick to specialty': view all available materials, use temperate language and, again, refrain from becoming judgmental. Regarding the latter, Dr Evans emphasised the importance of reviewing the work of the junior doctor who had no duty to exercise similar skill to that of an expert. In cases where evidence from the materials supplied was conflicting, he suggested that the correct course was to accept neither and to give alternative opinions based on each set of circumstances, explaining how these differed as a result of the alternative scenarios supplied.

**Dr N L G Eastman** (Psychiatry, St Georges Hospital, London) began by drawing a distinction between the evidence given by experts in psychiatry compared with other medical specialties. The psychiatrist is essentially interested in the same thing as the court—the behaviour or intent of the accused—a feature not shared by other medical experts. Dr Eastman stressed the distinction between medical and legal terms, calling for exclusive use of approved terminology and emphasising the difference between such terms and their legal counterparts, such as 'abnormality of mind', 'substantial impairment of responsibility' or 'insanity'. He expanded this argument by describing how psychiatric terms are directed towards taxonomy—prognosis, treatment, and understanding

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of psychopathology—whereas terminology employed by the law contains moral judgments which are value-laden, and constructs fictional notions that are defined with a specific purpose in mind. Dr Eastman saw the difficulty in translating one to the other as a central problem, illustrating this by defining some of these legal terms in the context of a psychiatric opinion obtained in relation to a defence of diminished responsibility under Section 2 of the Homicide Act 1957. He highlighted the subjectivity involved, especially when complicating factors, such as the effects of alcohol, have to be considered, and which can result in hypothetical situations that the expert may well be unable to resolve. Additional difficulties are encountered with cases that contain aspects of both diminished responsibility and provocation; the problem is that the medical factors do not always fit the available legal 'pigeonholes'. Dr Eastman emphasised further problems encountered in reconstructing a patient's state of mind at a considerable temporal distance, and the paradox that opinion largely depends on 'what the defendant said' rather than what can be objectively determined.

Within a civil context, 'psychological injury' is often tagged on to 'physical injury', but where a case is exclusively concerned with psychological injury there is a requirement that these disorders—such as 'nervous shock' or 'post-traumatic stress disorder'—should arise out of a sudden event, for example, a major disaster, and be capable of precise diagnosis.

**Dr S Leadbeater** (Forensic Pathology, Cardiff) discussed the limitations of forensic pathologists' evidence, using a 'back to basics' approach which questioned the position of the pathologist as a scientist. He pointed out that observations are rarely made with absolute knowledge of the pertaining circumstances, experimentation is limited by ethical considerations, and existing literature, being also subject to those considerations, can not be regarded as 'a body of established truths'. He illustrated this by considering a pathologist framing a cause of death—a task generally considered within the expertise of such a specialist—where the pathological findings were not specific: circumstantial evidence, necessarily of questionable objectivity, was then needed to allow a cause of death to be deduced. Should this be done by the pathologist he would be straying out of specialty, inappropriately taking on the role of the coroner, and placing an unwanted 'scientific' stamp upon an essentially lay opinion. Such an aleatory approach would have further implications should unscientific opinions, framed in this manner, become part of the established literature. Furthermore, even circumstantial information obtained within the context of a criminal trial cannot be viewed as attaining a standard sufficiently scientific to validate a hypothesis.

Dr Leadbeater further questioned the validity of strict adherence to the published literature by observing not only that there exists considerable potential

for variation as a result of differing populations under study and contrasting investigative approaches, but also that work on a specific subject is liable to have been performed from different standpoints and not necessarily by specialists within cognate departments, thus raising again the spectre of 'straying outside specialty'. Echoing Dr Eastman, he pointed to the contrast between legal terms and medical observation and diagnosis, emphasising that many questions to which the court seeks answers—such as degrees of force, the time taken to die, the exact cause of death, the amount of physical activity possible after specific injuries—are (though often, even habitually, considered within the forensic pathologist's sphere of expertise) actually highly subjective matters without reliable, scientific models for accurate quantification. Even where statistical evidence is available the validity of general findings applied to the individual case should be viewed with caution.

**Dr D Whittaker** (Forensic Odontology, University of Wales College of Medicine, Cardiff) began by remarking how an 'expert' within an obscure specialty may have rather less experience of a particular set of circumstances than might be expected from his exalted reputation. Moving on to the limitations of the field, he concentrated on three particular areas: first, the idiosyncratic nature of individual cases and the wide range of variables which may be brought into play in the production and development of a particular lesion that necessarily make dogmatism a dangerous trait for the expert called upon for interpretation as to cause and, especially, identification. Second, Dr Whittaker advised restraint in the use of the established literature as objective support for a hypothesis, citing the incomplete or, at least, incompletely documented, nature of past studies and the potential of statistics removed from their raw data to mislead when applied to a particular case in hand. Third, communication can be a major problem in expert testimony, particularly because pre-trial conferences either with the Crown Prosecution Service or with counsel are rare, and counsel are inconsistent in their approach to the preparation of the expert witness. In particular, the expert may often be asked in the witness box to comment upon matters or techniques hitherto unmentioned. There should be substantially more communication between experts on opposing sides before trial, to give adequate time for the proper evaluation of particular techniques or literature, and perhaps develop an 'agreed position'. With regard to the presentation of evidence, he commented on the inconsistency shown by judges when ruling as to the acceptability or otherwise of evidence prepared in the form of visual aids—an important adjunct in such a specialty. The expert's personality and delivery can affect the weight accorded to his evidence, with potentially serious consequences. Such a defect is unfortunately inherent in an adversarial system without the advantage of an agreed position prior to trial.

**Professor B H Knight** (Wales Institute of Forensic Medicine, Cardiff) read the paper of **Emeritus Professor D J Gee** (Forensic Pathology, University of Leeds) who was unfortunately unable to attend. He concentrated on the training of medical specialists, and put forward convincing arguments in favour of specific training for work as an expert witness. There has been a historical decline in forensic medicine teaching at undergraduate level despite the considerable involvement of doctors within the legal system, even if court appearances are now not as frequent as in the past. He felt that teaching would be better placed in a postgraduate context, but was uncertain whether this should occur within specialties or be broad-based instruction. There should be a greater involvement of lawyers in teaching doctors about jurisprudence; such teaching is available to other professional groups frequently used by the courts. Ultimately, there is little substitute for experience, and with better preparation for appearance as expert witnesses, doctors will find giving evidence less daunting and be considerably better placed to serve the courts.

**Dr T Rothwell** (Home Office Policy Advisory Board for Forensic Pathology (PABFOP)) described how the Board had been set up as a result of the Committee of Enquiry into forensic pathology to oversee training, accreditation, and quality assurance in the subject. It has just completed its first audit in which reports from all Home Office registered pathologists were reviewed by a panel. Feedback is being given to individuals and general recommendations have been published. While such quality assurance programmes are difficult to institute they are nevertheless worthwhile and, as pathologists are admitted to the list only for a limited period subject to renewal, potentially they do 'have teeth'.

In discussion, the differences in medical and legal practice between England and Wales and continental Europe were considered to be so great that little integration could be envisaged in the foreseeable future.

### Comments

The conference, although apparently restricted to a rather specialised area, in fact covered rather more territory than could be satisfactorily accommodated. Although this led to some frustration, this was not ultimately to its detriment, as it not only gave an opportunity for specialists from diverse fields whose common thread was their medico-legal interest to swap notes concerning areas of common difficulty, but it also provided a panorama from which a sharper choice of specific subjects might be made in the future.

There was considerable concern that the actual appearance in court and its end result, an impression

upon judge and jury, was not reaching an acceptable standard. There appeared to be a number of reasons for this: in particular, a lack of pre-trial communication between doctor and lawyer, together with the suggestion that our judicial colleagues were keen to have a convenient and simple 'answer' rather than accepting the intricate nature of medical evidence and seeking first to understand it and then to work with the doctor in order that it might be presented to the court clearly and simply. This would seem to favour pre-trial conferences both with the CPS and counsel (as may happen) and also with other experts to reach an agreed position (which does not happen). A further difficulty is with the medical witness himself. Over-interpretation appears to be frequent and it is not unusual for opinion to be given without adequate justification either from the literature or from cases cited. In this regard the practice in other jurisdictions, such as in some of the United States, would appear superior: discovery depositions ensure full disclosure of expert opinion and require all materials upon which an opinion is based to be introduced in evidence. Such a procedure allows more detailed evaluation of an expert's position and helps to demystify an 'opinion' whose origin might otherwise appear obscure, and is more likely to result in an agreed position before trial.

The use of figures, including statistics and probabilities, was also felt to be a particularly hazardous area and this may well reflect in part the unfamiliarity many medical practitioners feel with the subject. A more worrying facet, however, is the implication that pseudoscientific measurement of dubious origin and untested merit might be employed to add weight to an opinion.

Adequate training must become a priority for the profession in order to maintain a satisfactory standard of practice. The increasingly widespread demand that quality be demonstrated by the attainment of objective criteria may well result in the PABFOP being only one of many such bodies observing and regulating medico-legal practice. It is perhaps regrettable that no similar imperative appears to exist within the legal profession to ensure the best use of the expert witness. This does, however, provide further encouragement for discussion between medical experts in order to develop and redefine the role of the medical witness.

In conclusion, this conference must be considered a success as it has given both an enlightening overview of the contribution doctors make to the law and highlighted areas where there is a consensus favouring further discussion with potential for developing improved methods of practice and raising of standards. If such discussion occurs, it will have fully achieved its aims.