COMMENTARY



Keeping Junk Chiropractic Out of Court

An underlying conflict is growing between chiropractic and the law. Trial lawyers, interested in possible multimillion dollar settlements, contribute to the conflict by retaining chiropractic experts to testify in court to what the lawyer needs them to say but that may not necessarily be based on scientific truth.

The U.S. Supreme Court, American Medical Association (AMA), and National Board of Forensic Chiropractors (NBOFC) are addressing this medicolegal problem. Three cases directly affect the chiropractic professional: Grant vs Farnsworth (1988), Daubert vs Merrell Dow Pharmaceuticals (1993), and General Electric Co. vs Joiner (1997).

In Grant vs Farnsworth, the case was placed before the Appeals Court by Grant, who brought a civil rights action alleging violations of his constitutional rights arising from his arrest while protesting at a parade. At the request of a police officer who was restraining Grant, Farnsworth aided the police officer in subduing Grant. Grant stated that he was injured in the course of the arrest and later sought care from a chiropractor.

The court did not accept the evidence offered by the chiropractor. The court explained its position, "the parade protester alleging violations of his constitutional rights arising from his arrest were not entitled to admission of testimony of [the] chiropractor, where [the] chiropractor testified that he could not state with a reasonable degree of certainty the extent and causes of the protester's disability, and he admitted that he could only guess as to the effects of the parade incident on [the] protester because he lacked [the] necessary medical history of [the] protester before that incident."

Grant's chiropractor had his testimony excluded because the court determined that, as an expert, his testimony would not have assisted the jury in determining the extent of any injuries that were attributable to the parade incident. The court highlighted the gate-keeping function of the judge, noting that this function is based in two parts. First, the use of court time is expensive and it keeps the court from handling matters that might be of greater significance or require greater attention to detail than other cases that can be settled without resorting to a trial. Second, the gatekeeper is interested in testimony that would assist in the resolution of the disputed questions of fact. Because this case was settled before the updated Federal Rules of Evidence,⁴ the court based its decision on the Frye test of "general acceptance."

The "general acceptance" test had its genesis in Frye. In that case, in the course of discussing whether polygraph evidence should be admitted, the court made the following statement: "While courts will go a long way in admitting expert testimony deducted from well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in

which it belongs."

Although chiropractic has "general acceptance," and a chiropractor who is licensed can be considered to be an expert, the judge's role as gatekeeper is still to ensure that the information presented is useful in resolving the issue at hand. As mentioned previously, Grant's chiropractor "could only guess" at the effects of the arrest on Grant, and this degraded the value of his testimony; thus, it was dismissed.

Grant vs Farnsworth is significant for several reasons. First, this court case is interesting because it involved a chiropractor. Second, this case has been quoted since it was decided in March 1989. Third, this case further defined how expert opinion is to be presented in court so that the expert's testimony is admissible.

In Daubert vs Merrell Dow Pharmaceuticals,² Justice Harry Blackmun wrote: "The rules of evidence do assign the trial judge the task of ensuring that an expert's testimony both rest on a reliable foundation and is relevant to the task at hand." The Supreme Court established a general framework for resolving whether expert testimony is admissible. The decision provides specific guidance, in the form of four suggested factors, to judges when they screen expert scientific testimony. The four factors are as follows.

- Whether the expert's technique or theory may be tested or refuted
- 2. Whether the technique or theory has been a subject of peer review or publication
- The known or potential rate of error of a technique or theory when applied and the existence and maintenance of standards and controls
- 4. The degree of acceptance of a theory or technique within the relevant scientific community

In General Electric Co vs Joiner,³ judges were encouraged to use independent experts to establish the soundness of the theories of the expert witnesses. Justice Stephen Breyer wrote, "judges should strongly be encouraged to make greater use of their inherent authority to appoint experts," on the basis

of an amicus brief filed in the case by the *New England Journal of Medicine*. "Qualified experts could be recommended to courts by established scientific organizations, (National Academy of Sciences or the American Association for the Advancement of Sciences) or credentialing bodies." In chiropractic it has been usual that experts are board certified in orthopedics, radiology, and more recently forensics.

Court appointment of experts was recommended as early as 1901. Judge Hand⁶ recommended "a board of experts or single expert, not called by either side, who shall advise the jury of the general propositions applicable to the case which lie within his province."

The NBOFC was the first chiropractic organization to address the needs of judges subsequent to the 1993 case of Daubert vs Merrell. According to the Reference Manual on Scientific Evidence, 4 "The court's ability to handle complex science-rich cases has recently been called into question... critics have objected that judges cannot make appropriate decisions because they lack technical training...expert witnesses on whom the system relies are mercenaries." Facts of a given case are not delusional entities; right or wrong, they just are. The NBOFC has established education requirements leading to certification as a certified independent chiropractic forensic medical examiner. The Federal Rules of Evidence are a significant part of their forensic training. These forensic examiners qualify under federal rule 702. Rule 702 provides: "If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education may testify thereto in the form of an opinion or otherwise."4

The U.S. Supreme Court found that the Federal Rules of Evidence superseded the Fyre test.² Rule 702 and other Federal Rules of Evidence place limits on scientific testimony admissibility. The trial judge must ensure the reliability and relevance of the scientific testimony or evidence admitted. The expert's "scientific" knowledge and evidence must be based on "good science."²

Justice Breyer stated, "Our court recently made clear that the law imposes upon trial judges the duty, in respect to scientific evidence, to become evidentiary "gatekeepers." The judge, without interfering with the jury's role as trier of fact, must determine whether purported scientific evidence is "reliable" and will "assist the trier of fact."

It is important to note that Daubert's requirements are binding only in federal court. Federal Appellate Courts struggle over the standard for excluding opinions of clinical medical experts. Georgia has specifically rejected the Daubert test and, in fact, freely allows witnesses, once they meet the modest requirement to qualify as experts under state law, to present their opinions before the jury. In such nonfederal, non-Daubert jurisdictions, does this mean any person qualified as an "expert" has free license before a jury and the only defense against such testimony is cross-examination or counter expert testimony? The Ward¹ decision clearly answered no. The expert must do more than simply

qualify as an "expert" for his or her purported opinion to become admissible into evidence.

To protect against unreliable expert opinions, the Georgia Court of Appeals held that an expert must do more than merely establish his or her credentials and give an opinion. The expert must also tell how he or she took the facts of the case and applied his or her expertise to them to reach an opinion. The court warned that conclusory expert testimony that merely asserts that the defendant caused the plaintiff's injury is not enough to prevent summary judgment. The expert must also present an explanation for that opinion.

In Merrell Dow Pharmaceuticals, Inc. vs Havner⁸ the Texas Supreme Court opined, "We have held, however, that an expert's bare opinion will not suffice....The substance of the testimony must be considered." "This is true even if the expert uses the 'magic language' that the opinion is based on 'reasonable medical probability. "If the expert's scientific testimony is not reliable, it is not evidence."

Increasing concern exists about the impact of false or misleading medical testimony on patient care and credibility of the medical profession. The American Medical Association has decided to include the act of giving courtroom medical expert testimony as part of the official practice of medicine subject to peer review.⁹

Several medical and specialty organizations are working to deter false testimony. For example, the Florida Medical Association (FMA) has developed a program by which physicians who falsely testify are reported to the state licensing board for discipline. The AMA currently is studying programs like the FMA's.⁹

It is our opinion that the American Chiropractic Association (ACA) and state chiropractic boards will follow suit. As a result, when a doctor of chiropractic testifies in court as an expert witness that testimony may be subject to evaluation by other qualified chiropractic physicians, and, if that testimony is found to be inaccurate, sanctions or even the loss of their license to practice chiropractic may follow. Until now, no disciplinary mechanism has existed to punish the unreliable chiropractic expert witness and protect the integrity of the court system.

The NBOFC concurs with the AMA, which has identified that "some expert witnesses develop theories of medicine (chiropractic), or causation that are not sufficiently grounded in science." Examples may include misquoting standard journal articles and texts, making false statements, and deliberately omitting important facts and knowledge. Generally, an economic incentive to do so exists. Income derived from expert witness testimony can be substantial. In this day and age of managed care, economic incentives can change the position of the expert's testimony. "Junk science^{11,12} (chiropractic)" finds its way into court through unchecked testimony of physicians.

The NBOFC is spearheading an effort for chiropractic to weed out unreliable chiropractic testimony. It encourages the national trade and state associations to promote legislative action to sanction chiropractic physicians who testify falsely.

On December 7, 1998, the U.S. Supreme Court heard oral arguments in *Kumbo Tire vs Carmichael*¹³ and must wrestle with whether Daubert factors apply to all expert testimony or whether blanket application is appropriate in nonscientific fields where knowledge is experienced based.

The chiropractic profession needs to have an understanding of Daubert to ensure compliance and avoid opinion exclusion. Lacking this knowledge raises concerns on completion of their case analysis. Opinions based on properly documented analysis, with authoritative treatises and detailed workpapers, are much less likely to be excluded under Daubert scrutiny.

Another reason is recognizing when an opposing expert witness's work fails to meet the suggested factors. The expert may be the most qualified person to critique or review the work of the opposing expert and should have the most extensive knowledge of the body of information on which the opposing expert relies. Research materials may be invaluable in demonstrating that the method applied is not generally accepted, that it has been previously scrutinized and subsequently discredited, or that it fails to meet the tests for other reasons. One such article was recently published in *Spine* by Freeman et al.¹⁴ A suggestion that the opposing expert's opinion could be excluded on Daubert grounds could leave their side without admissible evidence.

It should be noted that being a licensed chiropractor alone is not sufficient to qualify as an expert in every case. Through specialized training to better understand the requirements and needs of the courts, the forensic chiropractic examiner can become a valuable tool in providing an "evidenced-based" opinion regarding legal questions. This training, similar to the independent medical examiner (IME) program sponsored by the National College of Chiropractic and NBOFC forensics program sponsored by Logan and Texas Chiropractic Colleges, should prepare the expert in

the methods, forensic analysis, and principles that have ϵ reliable evidence-based reasoning and methods that are scientifically valid.

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The Testifying Expert: Jurors' Perceptions

BY LEANNE N. CUPON, DC, DABFP, AND WARREN T. JAHN, DC, MPS, DABFP

Asurvey in the 1993 Personality and Social Psychology Bulletin of 529 civil trials found that 86 percent involved expert testimony. This survey highlights the strong role the expert witness plays in the current legal system. This role, though, is changing under accelerated technological advances, the latest scientific theories, Daubert challenges,* and alternative forms of dispute resolution. Lawyers are concerned about jurors' perceptions of expert witnesses because of the critical importance of expert testimony in litigation involving forensic science (application of medical facts to legal issues and proceedings).

This article reviews juror perceptions of expert witnesses, based on jury research conducted before litigation, post-trial juror interviews, and published jury research literature. Basic rules of testimony are offered.

- Live testimony is preferred by jurors to videotaped deposition testimony. It is far more difficult for jurors to comprehend and pay attention to a videotaped expert. Experts who are seen as more objective in their testimony and who acknowledge the limitations of their professional evaluations are more credible.
- 2. Jurors actively assess the consistency of an expert's testimony. They may ask themselves, "Does the expert witness avoid statements during testimony that contradict other aspects of his/her testimony? Is the expert's testimony consistent with the overall framework of the case, with the expert's previous deposition testimony, and with the expert's published research work? Inconsistency reduces the expert's credibility with jurors, who then tend to discount it.
- 3. Some jurors may have greater familiarity with the subject matter of a case than do other

jurors. These jurors may become the "experts" during deliberations. Expert testimony that contradicts the expert jurors' knowledge is perceived as less credible by them, and they may communicate their opinion to the other jurors.

4. Comprehensibility is an important factor in the perceived credibility of the expert witness. Jurors will not be influenced by an expert they cannot understand. When expert testimony becomes increasingly technical or complex, jurors are less willing to make the effort to understand it. The more passive and inattentive the jurors' own thinking and analysis of the



expert's testimony, the more susceptible the jurors become to counterfactual arguments offered by attorneys. Counterfactual arguments can be persuasive because they offer jurors psychological relief from the burden of trying to understand difficult case facts based on scientific or medical data offered by the experts.

The Testifying Experts

Experts who cannot communicate the points they are making come across as evasive or boring. Experts who over-explain, utilizing more detail than jurors feel they need, lose jurors' attention. Jurors appreciate expert witnesses they can understand. Experts are more likely to be persuasive when they adjust their vocabulary and the detail of their explanations to the level of a lay, non-professional audience. Easy comprehension by jurors reduces the influence of counterfactual arguments by opposing attorneys and also reduces the influence during deliberations of jurors who consider themselves experts.

- 5. The expert's history of previous court testimony and the size of the fee lead to the perception that the expert is a hired gun. The jurors may perceive that the expert's testimony is influenced by money. It is important to keep in mind that most jurors have no personal experience with what experts typically are paid for their time out of the office (giving expert opinions), other than inferences they have made based on the events surrounding the trial and comparisons of what experts make, versus what jurors earn. Thus, the lowest fee reported by a trial expert becomes the "anchor" by which the jurors evaluate the fees reported by the other experts. The greater the comparative difference in fees, the greater the perceived influence of the earned fee on the highest- or higher-paid expert.
- 6. Jurors tend to be more convinced by a more credentialed expert. Does being the more credentialed expert nullify the effect of being the higher-paid expert? In one study, researchers conducted an experiment to test the effect of level of pay (lower vs. higher) and credentials (lower vs. higher) on mock jurors' perceptions of plaintiff expert testimony in a toxic tort case. In this case, the higher-paid/higher-credentialed expert was perceived by mock jurors as the least effective expert. The mock jurors were most convinced by the lower-paid/higher-credentialed expert. The lower-paid/lower-credentialed expert was as credible as the higher-paid/lower-credentialed expert. The researchers speculated that their mock jurors used the information about fees and credentials in combination to infer greater frequency of court testimony in other cases, hence the higher-paid and higher-credentialed expert was inferred to be a hired gun.

A follow-up laboratory study examining the effects of pay (lower vs. higher) and frequency of prior testimony (novice vs. frequent testifier) was performed to test their hypothesis. Credentials of the expert were held constant. Using the same toxic tort case, the researchers found that the proportion of mock jurors who were convinced was highest for the higher-paid/novice plaintiff expert (described as testifying previously in one case), followed by the lower-paid/novice plaintiff expert and the lower-paid/frequently testifying plaintiff expert. Mock jurors were least convinced by the higher-paid/frequently testifying plaintiff expert. Health care providers that function as expert witnesses must not become "spin doctors." They are expected to be objective and not adopt a position as advocates or partisans in the case. The experts' opinion should be compelling but not overly persuasive.

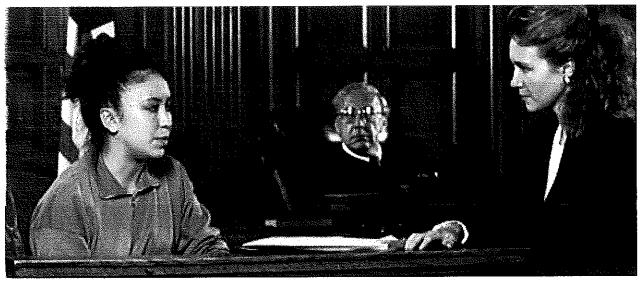
The expert witness should consider some basic rules:

1. Make sure that you understand the issue(s).

Determine what the key legal or policy issues are and what burden-of-proof issues may be present. Make sure that you have a command of the specific data and facts surrounding the specific event or circumstances.

- **2. Use plain language.** Avoid jargon, colloquialisms, clichés, and slang, as well as excessively formal, flowery, or verbose language.
- 3. Answer the question(s). Use clear, concise, and definite language. Address uncertainties explicitly, and explain the impact of these uncertainties on your opinions. Don't purposely hedge or be ambiguous. Restrict your opinions to those observations, clinical findings, outcome assessments, data, and supporting literature that are relevant. Your opinion should be based on scientific or document investigation, not circumstantial evidence or unreliable testimony (junk science). Try not to introduce new issues that may be of only academic importance or completely irrelevant. Avoid making comments that are subjective, personal, or inappropriate.
- **4. Explain why.** Give the reasons why your observations, clinical findings, outcome assessments, data, and supporting literature are relevant.

The Testifying Experts



Explain why and how you came to your conclusions. Identify all relevant sources of information and all sources of evidence-based authority. Demonstrate that your opinion is based on factual data; well-designed, valid studies; or the consensus of other experts in the field. Explain that your conclusions are based on generally-accepted premises or data that would survive peer review.

5. Update and/or obtain specialized forensic science knowledge, skill, training, or experience to assist the trier of fact in matters that exceed the common knowledge of ordinary people or peers.

In conclusion, studies have indicated that jurors are more likely to focus on and be influenced by peripheral factors such as fees, frequency of previous court testimony, credentials, physical appearance, or demeanor when they are unable to comprehend and assess the content of expert testimony. Additionally, a hired-gun effect is

most likely to occur when jurors cannot understand what the expert is trying to tell them.

*Editor's Note: See JACA, Vol. 36, No. 9, pp. 34-37, "Chiropractic and the Daubert Expert Witness."

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