THE SUPREME COURT OF NEW HAMPSHIRE

Grafton
No. 2019-0092

SANDRA MOSCICKI

v.

CHARLES LENO & a.

MATTHEW LENO & a.

v.

SANDRA MOSCICKI & a.

Argued: November 19, 2019
Opinion Issued: March 6, 2020

Primmer Piper Eggleston & Cramer PC, of Manchester (Gary M. Burt and Brendan D. O'Brien on the brief, and Mr. Burt orally), for the appellant.

Seufert Law Offices, P.A., of Franklin (Christopher J. Seufert on the brief and orally), for the appellees.

DONOVAN, J. In this interlocutory appeal, see Sup. Ct. R. 8, Sandra Moscicki appeals an order of the Superior Court (MacLeod, J.) denying her motion to exclude expert testimony proffered by the appellees, Charles and Heidi Leno. The interlocutory question transferred to us asks us to determine

whether, for an expert opinion on causation to be admissible in a toxic tort case, the expert must consider the "dose-response relationship" in reaching that opinion. We answer in the negative and remand.

I. Facts

We accept the statement of the case and facts as presented in the interlocutory appeal statement and rely upon the record for additional facts as necessary. See State v. Hess Corp., 159 N.H. 256, 258 (2009). In July 2008, the Lenos' twin children, a boy and a girl, were born. In September 2009, the Lenos and their children moved into an apartment owned by Moscicki's trust. Shortly thereafter, when the children were approximately eighteen months old, Heidi Leno "expressed concerns" regarding their son's "speech and development." Charles Leno had also observed that their son exhibited "significant developmental problems in the months before his eighteen-month checkup."

On October 21, 2009, both children were tested for lead. The test revealed that the son had elevated blood lead levels (EBLLs) of 4.6 micrograms per deciliter (μg/dl) and the daughter had EBLLs of 3.7 μg/dl. The children were again tested for lead on July 29, 2010, shortly after their second birthday. This test revealed that the son had EBLLs of 17 μg/dl and the daughter had EBLLs of 19 μg/dl. Thereafter, the Lenos and their children moved out of Moscicki's apartment.

Moscicki brought an action against the Lenos, seeking unpaid rent. The Lenos then filed an action against Moscicki, alleging that their children suffered harm as a result of lead exposure while living in the apartment. The trial court consolidated these actions.

The Lenos retained Dr. Peter Isquith, a psychologist, to perform a neuropsychological assessment of the children and issue reports pursuant to RSA 516:29-b (Supp. 2019). When assessing the son, Isquith administered the Reynolds Intellectual Assessment Scales (RIAS) and determined, based upon the son's performance, that he had a full scale IQ score of 40, "the lowest score that one could achieve" under the RIAS test. Other tests revealed that the son had "global deficits in cognition and communication complicated by deficits in motor planning and sequencing, the ability to adjust to change, self-regulation, and anxiety." Isquith also observed that the son's academic skills were "very limited." At the end of his report, Isquith discussed his opinion on the cause of the son's deficits, stating: "It is more likely than not that the lead exposure is a substantial contributing factor to [his] deficits."

Dr. Robert Karp, a medical doctor trained in pediatrics, also issued a report on the Lenos' children. Karp's report discussed, generally, the known

consequences of low levels of lead exposure on children's development. He noted that studies show that "neurodevelopmental delays can occur" with EBLLs as low as 5 μg/dl. He also noted the son's specific levels of lead exposure and Isquith's conclusions regarding the son's developmental deficits. Based upon this information, Karp concluded:

> In my opinion, to a reasonable degree of medical certainty, [the son] was exposed to lead, experienced lead poisoning at a young age, at high levels, and over a sustained period of time. As documented by the IEP team and Dr. Isquith, the consequences of lead poisoning are readily apparent. These are certain to affect his achievement of his full potential for employment or life satisfaction.

Moscicki moved in limine to exclude the testimony of Isquith and Karp as to "the impact of lead exposure on [the son]'s neurological development," asserting that their conclusions "are unsupported by the prevailing medical literature" on the dose-response relationship, and are therefore unreliable. See RSA 516:29-a, I(b) (2007); David L. Eaton, Scientific Judgment and Toxic Torts — A Primer in Toxicology for Judges and Lawyers, 12 J.L. & Pol'y 5, 11, 15 (2003) ("The 'dose-response' in a given individual describes the relationship between the magnitude or severity of the effect(s)" and the "amount of chemical that enters the body."). She contended that "the literature indicates that [EBLLs] of 17 μg/dl are associated with a loss of approximately five to ten IQ points, whereas [the son]'s IQ of 40, as reported by Dr. Isquith, represented a substantially higher decrement of sixty points below the mean IQ of 100." Therefore, she argued, the experts' opinions lacked support "for the conclusion that [EBLLs] of 17 μg/dl can result in a drop of 60 points."

The trial court held a three-day evidentiary hearing on Moscicki's motion, in which it heard testimony from Isquith, Karp, and two experts called by Moscicki. Following the hearing, the trial court concluded that Isquith's and Karp's opinions were admissible. Moscicki filed a motion to reconsider, which the trial court denied. This interlocutory appeal followed.

II. Analysis

The superior court transferred the following question for our consideration:

> Whether in this jurisdiction in a toxic tort case the dose-response relationship for the toxin at issue as recognized in the scientific literature is an inherent or implicit and necessary component of the methodology that an expert witness must consider and/or include in his or her opinion as a condition or prerequisite for admissibility at trial under RSA 516:29-a, and, if not considered or

> included, must the expert's testimony be excluded where the expert's opinion is otherwise based on reliable data and methodology.

Moscicki argues that we must answer in the affirmative because "[t]he dose-response relationship is a necessary component that the expert must consider" in a toxic tort case, "and the failure to do so requires exclusion of the expert's opinion." We construe this interlocutory question as asking whether, as a matter of law, an expert opinion in toxic tort cases must be excluded when the expert does not consider a particular principle or methodology. See Murphy v. McQuade Realty, Inc., 122 N.H. 314, 316 (1982) (explaining that "the scope of review on an interlocutory appeal is necessarily narrow"). Because the statute and our case law governing expert testimony require courts to determine admissibility on a case-by-case basis, we decline to adopt a bright-line rule as to admissibility of expert testimony in toxic tort cases, and, therefore, answer in the negative. See RSA 516:29-a (2007); N.H. R. Ev. 702.

New Hampshire Rule of Evidence 702 authorizes the trial court to admit expert witness testimony. See N.H. R. Ev. 702. To be admissible, however, expert testimony must cross a threshold of reliability. Stachulski v. Apple New England, LLC, 171 N.H. 158, 163 (2018). To determine the reliability of expert testimony, the trial court must apply RSA 516:29-a, portions of which codify principles outlined by the United States Supreme Court in Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 592-95 (1993). Id.; see also Baker Valley Lumber v. Ingersoll-Rand, 148 N.H. 609, 614-16 (2002) (applying the Daubert framework to evaluate the reliability of expert testimony under Rule 702). RSA 516:29-a provides:

> I. A witness shall not be allowed to offer expert testimony unless the court finds:
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> (a) Such testimony is based upon sufficient facts or data;
>
> (b) Such testimony is the product of reliable principles and methods; and
>
> (c) The witness has applied the principles and methods reliably to the facts of the case.
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> II. (a) In evaluating the basis for proffered expert testimony, the court shall consider, if appropriate to the circumstances, whether the expert's opinions were supported by theories or techniques that:
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> (1) Have been or can be tested;

(2) Have been subjected to peer review and publication;

(3) Have a known or potential rate of error; and

(4) Are generally accepted in the appropriate scientific literature.

(b) In making its findings, the court may consider other factors specific to the proffered testimony.

When applying these factors, the trial court "functions only as a gatekeeper, ensuring a methodology's reliability before permitting the fact-finder to determine the weight and credibility to be afforded an expert's testimony." Stachulski, 171 N.H. at 164 (quotation omitted). We, in turn, review the trial court's gatekeeping decisions to determine whether its exercise of discretion is sustainable. Id. Although the proponent of expert testimony bears the burden of proving its admissibility, the burden is not especially onerous because "'Rule 702 has been interpreted liberally in favor of the admission of expert testimony.'" Id. (quoting Levin v. Dalva Bros., Inc., 459 F.3d 68, 78 (1st Cir. 2006)). Indeed, the overall purpose of Rule 702 and RSA 516:29-a is to ensure that a fact-finder is presented with reliable and relevant evidence, not flawless evidence. Osman v. Lin, 169 N.H. 329, 335 (2016). Thus, as long as an expert's scientific testimony rests upon reliable grounds, it should be tested by the adversary process, rather than excluded from jurors' scrutiny for fear that they will not grasp its complexities or satisfactorily weigh its inadequacies. Stachulski, 171 N.H. at 164.

Moscicki urges us to determine that, as a matter of law, an expert opinion in a toxic tort case is not "the product of reliable principles or methods," RSA 516:29-a, I(b), if the expert does not consider the dose-response relationship. As support for this contention, Moscicki argues that the scientific literature on the dose-response relationship constitutes a "large, consistent body of well-regarded, peer-reviewed" literature that has been deemed the "'hallmark of the science of toxic torts.'" (Quoting McClain v. Metabolife Intern., Inc., 401 F.3d 1233, 1240 (11th Cir. 2005)).

When evaluating the basis of proffered expert testimony, one factor courts "shall consider, if appropriate to the circumstances," is "whether the expert's opinions were supported by theories or techniques that . . . [a]re generally accepted in the appropriate scientific literature." RSA 516:29-a, II, II(b). Thus, RSA 516:29-a, II requires courts to consider whether the proffered testimony is based upon theories or techniques that are generally accepted; it does not require courts to exclude testimony where the testimony is not supported by the theory or technique that has the most acceptance. Indeed,

while "[w]idespread acceptance can be an important factor in ruling particular evidence admissible," Daubert, 509 U.S. at 594, it is not the only factor. "Scientific conclusions are subject to perpetual revision," and our role is not to rubber-stamp a scientific methodology merely because it enjoys widespread acceptance at the present time. Id. at 597. For this reason, courts must look to the methodology employed by experts in each specific case to determine whether an expert opinion is "the product of reliable principles and methods," RSA 516:29-a, I(b), which, as the Daubert Court emphasized, is a "flexible" inquiry. Daubert, 509 U.S. at 594.

Moscicki argues that "[c]ourts considering the issue have unequivocally concluded that to ignore the basic principle of dose response in opining on the effect of a toxin is the hallmark of an unreliable methodology." When determining the reliability of expert opinions in toxic tort cases, courts have indeed considered the dose-response relationship to be critical to establishing the causal connection between a person's exposure to a toxin and a particular injury. See, e.g., McClain, 401 F.3d at 1242 ("The expert who avoids or neglects [the dose-response relationship] without justification casts suspicion on the reliability of his methodology."); In re Accutane Products Liability, 511 F. Supp. 2d 1288, 1293 (M.D. Fla. 2007) ("Dose is critical to any evaluation of toxicity of a drug."); Sherwin-Williams Co. v. Gaines, 75 So. 3d 41, 45-46 (Miss. 2011) ("A dose-response ratio is critical to determining the causal connection between a poison and an injury.").

However, in these cases, courts have not concluded that, as a matter of law, an expert opinion in a toxic tort case must be based upon the dose-response relationship for the opinion to be admissible. See McClain, 401 F.3d at 1240, 1255; In re Accutane, 511 F. Supp. 2d at 1291-94; Sherwin-Williams, 75 So. 3d at 45-46. Rather, these courts have carefully examined the specific expert opinion at issue to determine whether it was the product of a reliable principle or method, taking into consideration the dose-response relationship as the current, generally accepted methodology used to establish the causal connection between a toxin and an injury. See McClain, 401 F.3d at 1240 (concluding that an expert's opinion was not the product of a reliable methodology because, in part, the expert drew "speculative conclusions about [a drug]'s toxicity from questionable principles of pharmacology, while at the same time, neglecting the hallmark of the science of toxic torts — the dose-response relationship"); In re Accutane, 511 F. Supp. 2d at 1291-92 (concluding that an expert's opinion was not "supported by sufficiently reliable data" because, in part, he relied upon certain studies but "ignore[d] the parts of those studies that do not support his opinion, particularly the dose relationship," and drew "conclusions not supported by the authors"); Sherwin-Williams, 75 So. 3d at 45-46 (concluding that expert opinions "were not reliable" because they relied upon a dose of lead and duration of exposure that were based upon "mere speculation"); see also Parker v. Mobile Oil Corp., 857

N.E.2d 1114, 1121-22 (N.Y. 2006) (rejecting the notion that the dose-response relationship is always necessary to establish causation, "provided that whatever methods an expert uses . . . are generally accepted in the scientific community," but upholding the trial court's exclusion of the expert's testimony based upon the facts of the case).

While the literature and case law demonstrate that the dose-response relationship is a widely accepted methodology in this field, we decline to adopt a rule that would prohibit an expert from utilizing another principle or method to demonstrate the causal connection between the exposure to a toxin and a particular injury. Instead, we leave it to the trial court, in each individual case, to determine whether a particular principle or method is reliable under the factors set forth in RSA 516:29-a. Accordingly, we conclude that, for an expert opinion on causation in a toxic tort case to be admissible, the expert is not required to base his or her opinion on the dose-response relationship, provided that the opinion is the product of another reliable principle or method. See RSA 516:29-a, I(b), II. This conclusion, however, does not preclude a court from considering the dose-response relationship, as a generally accepted methodology, in determining the reliability of an expert's principles or methods, as other courts have done. See, e.g., McClain, 401 F.3d at 1240-45. Given the narrow question presented by this interlocutory appeal, we express no opinion as to whether the trial court sustainably exercised its discretion in admitting the proffered expert testimony. See Stachulski, 171 N.H. at 164 (setting forth our standard of review of the admission of expert testimony).

III. Conclusion

We hold that an expert's opinion on causation in a toxic tort case is not required, as a matter of law, to be based upon the dose-response relationship, provided that the expert's opinion is the product of an otherwise reliable principle or method. Therefore, we answer the interlocutory question in the negative and remand.

Remanded.

HICKS, BASSETT, and HANTZ MARCONI, JJ., concurred.