

2014 DEC 15 AM 9:00

IN THE COURT OF APPEALS OF THE STATE OF WASHINGTON

ALLYN LINDEMANN and STEVEN	)	
LINDEMANN, wife and husband,	)	No. 70448-6-1
	)	
Appellants,	)	DIVISION ONE
	)	
v.	)	
	)	
TOYOTA MOTOR CORPORATION, a	)	
Japanese corporation; TOYOTA	)	
MOTOR SALES, U.S.A., INC., a	)	UNPUBLISHED OPINION
California corporation; TOYOTA	)	
MOTOR NORTH AMERICA, INC., a	)	FILED: December 15, 2014
California corporation;	)	
	)	
Respondents,	)	
	)	
and	)	
	)	
JOCELYNNE WHEELER,	)	
	)	
Defendant.	)	
_____		

BECKER, J. — A drunk driver crossed the centerline and caused a collision in which the plaintiff in this product liability suit was badly hurt. The plaintiff sued the manufacturer of her own car, claiming the car did not adequately protect her from the crash. In this appeal from a defense verdict, we conclude it was not unfair for an expert witness to testify that the plaintiff's obesity was a factor in

determining the severity of her injuries. We also conclude the trial court's refusal to give an eggshell plaintiff instruction does not warrant a new trial.

## FACTS

Appellant Allyn Lindemann was driving her 2004 Lexus ES 330 on a two-lane road in Redmond on June 7, 2009, on her way home from her son's high school graduation. She was wearing safety belts and travelling about 20 miles per hour. A Jeep Liberty traveling in the opposite direction crossed the centerline traveling 55-60 miles per hour. The front left corners of the vehicles collided at a 15 degree angle.

Lindeman's car was catastrophically damaged. The passenger compartment was so deformed that it took paramedics more than 20 minutes to extricate Lindemann. The front dash crumpled over her legs.

Lindemann's legs were badly fractured. Her left thigh suffered extensive degloving, an injury where the skin is severed from the underlying tissue. She had a right pelvic fracture and bilateral rib fractures. She lost a lot of blood and went into shock. Her injuries also included stroke and acute lung injury. She was treated at Harborview Medical Center for more than six months.

Lindemann brought suit against Toyota Motor Corporation, the manufacturer of the Lexus. Her theory of the case was that a defective design at the front end caused the passenger compartment to collapse around her and that the resulting loss of occupant space caused her to suffer enhanced injuries over and above the injuries that would have occurred if the car had been crashworthy. See Baumgardner v. Am. Motors Corp., 83 Wn.2d 751, 522 P.2d 829 (1974);

Larsen v. Gen. Motors Corp., 391 F.2d 495 (8th Cir. 1968), cited by Baumgardner, 83 Wn.2d at 754. Toyota defended the design and contradicted Lindemann's proof of the extent of the deformation of the passenger compartment. Toyota also challenged Lindemann's proof of causation and claimed that because of the high crash forces imparted to the Lexus in the collision, the injuries Lindemann experienced would have been the same even if there had been no deformation of the passenger compartment.

At the time of the collision, Lindemann, age 56, was obese. She was about 5 feet 8 1/2 inches tall and weighed 239 pounds. Toyota proposed to present testimony from an expert witness, Dr. Elizabeth Raphael, that factored Lindemann's weight into Newton's second law of motion (force = mass x acceleration) to calculate the force that the collision drove into Lindemann's lower extremities. Dr. Raphael had stated in deposition that Lindemann needed to be 100 pounds lighter to avoid the critical injury to her pelvis. Lindemann moved in limine to prohibit Dr. Raphael from "blaming" Lindemann's obesity for her injuries. The trial court denied the motion.

The trial took place over three weeks in the spring of 2013. No objection was made to the three key instructions that framed the case for the jury:

#### INSTRUCTION NO. 8

In a case for enhanced injuries, the plaintiff has the burden of proving each of the following propositions:

First, that Toyota designed a defective 2004 Lexus ES 330 that was not reasonably safe in reasonably foreseeable accidents or collisions; and

Second, that the defective condition of the 2004 Lexus ES 330 proximately caused the plaintiff injuries which she would not

have otherwise sustained in the accident or collision, absent the product defect.

The plaintiff need not prove that the defective condition of the product was a cause of the accident or collision itself, just that the defective condition of the product was a proximate cause of the enhanced injury or damage.

If you find from your consideration of all of the evidence that each of these propositions has been proved against Toyota, then your verdict should be for the plaintiff on this issue. You should answer Question No. 2 of the verdict form "yes."

On the other hand, if you find any of these propositions has not been proved against Toyota, your verdict on this issue should be for Toyota. You should answer Question No. 2 of the verdict form "no."

#### INSTRUCTION NO. 9

A manufacturer has a duty to design products that are reasonably safe as designed.

There are two tests for determining whether a product is not reasonably safe as designed. The plaintiff may prove that the product was not reasonably safe at the time it left the manufacturer's control using either of these two tests.

The first test is a balancing test. Under that test, you should determine whether, at the time the product was manufactured:

the likelihood that the product would cause injury or damage similar to that claimed by the plaintiff, and the seriousness of such injury or damage outweighed the burden on the manufacturer to design a product that would have prevented the injury or damage, and the adverse effect that a practical and feasible alternative design would have on the usefulness of the product.

The second test is whether the product is unsafe to an extent beyond that which would be contemplated by the ordinary user. In determining what an ordinary user would reasonably expect, you should consider the following:

- a. the relative cost of the product;
- b. the seriousness of the potential harm from the claimed defect;
- c. the cost and feasibility of eliminating or minimizing the risk; and
- d. such other factors as the nature of the product and the claimed defect indicate are appropriate.

If you find that the product was not reasonably safe as designed at the time it left the manufacturer's control and this was a proximate cause of the plaintiff's injury, then the manufacturer is at fault.

INSTRUCTION NO. 10

A manufacturer of an automobile has a duty to design the product to be crashworthy, that is, the product must be reasonably safe in reasonably foreseeable accidents or collisions. Based on this duty, a manufacturer of an automobile is liable for that portion of the damage or injury caused by the product design or manufacturing defect over and above the injury or damage that probably would have occurred as a result of a reasonably foreseeable accident or collision impact even without the product defect. The manufacturer is liable for this enhanced injury or damage even though the defect did not cause the accident or collision itself.

Lindemann proposed that the jury also be instructed on the eggshell plaintiff rule. The trial court declined to give the instruction.

The jury rendered its verdict on April 5, 2013, on a form with six questions. The first question was "Did the defendant supply a product that was not reasonably safe? . . . (*DIRECTION: If you answered 'no' to Question 1, sign this verdict form. If you answered 'yes' to Question 1, answer Question 2.*)" The second question was "Did the unsafe condition of the product proximately cause plaintiff Allyn Lindemann to suffer enhanced injuries? The remaining questions concerned the liability of the driver of the Jeep Liberty and damages.

The jury answered "no" to the first question and returned the verdict.

Lindemann appeals from the judgment on the verdict. She contends the trial court committed two reversible errors: (1) denying Lindemann's motion to exclude Dr. Raphael's testimony about the effect of her obesity and (2) refusing to give the eggshell plaintiff instruction.

### DR. RAPHAEL'S TESTIMONY

Lindemann presented two expert witnesses who testified that Toyota could have designed the car with more front-end strength to prevent the dash from crumpling in upon her legs. Another expert witness, Dr. Joseph Burton, testified that the force of the accident alone would not have been enough to cause the most severe injuries. In his opinion, the injuries resulted from the loss of occupant space when the front-end structure gave way. He testified that "Lindemann didn't get the full benefit of going into the cushion of the airbag, because it was moving to her right at the same time that she was moving forward into it."

Toyota presented Dr. Raphael to counter Dr. Burton's opinion. Dr. Raphael testified that she is an emergency room physician and engineer with expertise in the field of occupant kinematics. She is a clinical associate professor at Stanford University Hospital and received her bachelor's degree in mechanical engineering from MIT. She has treated thousands of patients and has analyzed car accidents and biomechanics since the mid-1990s.

Dr. Raphael testified that in frontal barrier crash tests for the kind of car Lindemann was driving, studies have shown that about 50 percent of a person's body weight goes into the shoulder belt and 50 percent into the lap belt. To be conservative, she assumed that only 100 pounds of Lindemann's weight went into the lower lap belt. Using Newton's second law, Dr. Raphael concluded that the force of the collision was 2,500 pounds, calculated by multiplying 100 pounds times 25 Gs (Lindemann's estimated acceleration). She testified that it would

take around 2,000 pounds of force to cause the pelvic fractures Lindemann experienced. Dr. Raphael testified that Lindemann's knees would have struck the forward structures of the car even without any deformation of those structures.

To reach this conclusion, Dr. Raphael consulted a published study in which seat-belted obese cadavers were found to have more "forward excursion" (forward movement) in high speed frontal barrier crash tests than nonobese cadavers. In some cases, this meant that the seatbelt would have almost no restraining properties on an obese person initially:

[the seatbelt] doesn't really stop the forward motion until it's up against the hard bony parts of the body, in this case the pelvis, and so it has to move through all of that soft tissue in front of it until it restrains the pelvis.

And in order to do that, the cadaver of an obese occupant is going to move forward multiple inches, as much as eight inches forward, before the seatbelt has any real restraining properties on the pelvis.

By contrast, for a nonobese body, the pelvis stays almost completely in place. Dr. Raphael observed that while in the study there was nothing in front of the cadavers, in a typical vehicle, the instrument panels, knee bolsters, and dash would impact the driver's lower body. For Lindemann, "the crash forces are so severe and the amount of soft tissue that she has is sufficient that it allows her that forward excursion into the structures in front of her."

Lindemann contends Dr. Raphael's testimony should have been excluded as irrelevant.

Admissibility of expert testimony is reviewed for abuse of discretion.

Weyerhaeuser Co. v. Commercial Union Ins. Co., 142 Wn.2d 654, 683, 15 P.3d

115 (2000). Evidence is relevant and admissible if it tends to make the existence of a material fact more or less probable. Medcalf v. Dep't of Licensing, 83 Wn. App. 8, 16, 920 P.2d 228 (1996), aff'd, 133 Wn.2d 290, 944 P.2d 1014 (1997).

Lindemann argues “the only possible defense under RCW 7.72.030(1)(a) is that it was too burdensome to design a car that would have protected Ms. Lindemann. Dr. Raphael’s testimony had no bearing on that question and therefore had no probative value.” This is incorrect. Lindemann was required to prove that the defect enhanced her injuries. Testimony that she would have experienced the same injuries without the defect was relevant.

Lindemann next contends the prejudicial nature of Dr. Raphael’s testimony exceeded its probative value. Even if relevant, evidence must be excluded if its probative value is outweighed by the danger of unfair prejudice. Medcalf, 83 Wn. App. at 16-17. A danger of unfair prejudice exists when evidence is likely to stimulate an emotional response rather than a rational decision. Salas v. Hi-Tech Erectors, 168 Wn.2d 664, 671, 230 P.3d 583 (2010).

The trial court recognized, and Toyota does not dispute, the existence of societal prejudice against people who are obese. The court nevertheless allowed the testimony as essential to Toyota’s defense. This was not an abuse of discretion. Dr. Raphael testified that the collision pushed Lindemann forward and jammed her knees against the dash with greater force than would have been the case with a driver of lesser mass. She also explained that a person with an unusually large amount of soft tissue will travel farther forward before restraints engage. Unlike in Salas, where reference to the plaintiff’s immigration status was



held unduly prejudicial in a workplace injury case, here the references to Lindemann's excessive weight were necessary for the jury to understand Toyota's defense.

Next, Lindemann contends Dr. Raphael's testimony should have been excluded as inadmissible under Frye v. United States, 293 F. 1013 (D.C. Cir. 1923).

Under Frye, the primary goal is to determine whether evidence is based on established scientific methodology. State v. Gore, 143 Wn.2d 288, 302, 21 P.3d 262 (2001), overruled on other grounds by State v. Hughes, 154 Wn.2d 118, 110 P.3d 192 (2005). Both the scientific theory underlying the evidence and the technique or methodology used to implement it must be generally accepted in the scientific community for evidence to be admissible under Frye. Gore, 143 Wn.2d at 302. If the evidence "does not involve new methods of proof or new scientific principles," it is not subject to the Frye test. State v. Baity, 140 Wn.2d 1, 10, 991 P.2d 1151 (2000). Even in the absence of scientific studies, an expert's opinions may be based on his or her own training, practical experience, and acquired knowledge. Reese v. Stroh, 128 Wn.2d 300, 307-08, 907 P.2d 282 (1995). Once a methodology is accepted in the scientific community, then application of the science to a particular case is a matter of weight and admissibility under ER 702, which allows qualified experts to testify if scientific, technical, or other specialized knowledge will assist the trier of fact.

Lindemann argues that Dr. Raphael's testimony involved a novel and unreliable application of science. She contends there is no accepted scientific

basis for the calculations Dr. Raphael used to determine that Lindemann's lower body sustained 2,500 pounds of force in the collision. Specifically, Lindemann critiques Dr. Raphael's assumption that 40 percent of Lindemann's weight would go into her lower body and her failure to account for the way a lap belt and air bags would reduce the impact on Lindemann's lower body.

The scientific principle Dr. Raphael primarily relied on, Newton's second law of motion, is not novel. Dr. Burton, a witness for Lindemann, testified that Lindemann's weight was a necessary part of the equation to determine the force her body experienced in the crash. He also agreed that her soft fatty tissue meant she "won't be restrained as easily" and it would be "more difficult to slow that mass down."

In a case cited by Lindemann, the court found that in applying Newtonian physics, the witness was making speculative assumptions and therefore his results could not be considered reliable regardless of the methodologies used. Mohney v. USA Hockey, Inc., 300 F. Supp. 2d 556, 570 (2004), aff'd, 138 F. Appx. 804 (6th Cir. 2005), cert. denied, 547 U.S. 1020 (2006). Here, unlike in Mohney, Dr. Raphael's assumptions were reasonably premised on academic studies and her experience. Lindemann's critique fails to demonstrate that Dr. Raphael's methods are not accepted in the relevant scientific community. At most, they suggest that her conclusions may have been inaccurate or of limited utility. These are concerns more appropriately addressed by cross-examination, not by disqualification under Frye.

Dr. Burton and Dr. Raphael agreed that force = mass x acceleration was the correct formula for determining the amount of force acting on Lindemann, that 25 Gs was a reasonable estimate of acceleration in the crash, and that Lindemann's mass was a relevant variable. They disagreed about whether the seatbelts and the airbags slowed Lindemann's forward movement. The record reflects a professional disagreement about how Lindemann's body moved in the collision. Dr. Raphael's testimony, like Dr. Burton's, used scientific principles, not a fundamentally novel analysis of the type the Frye test is designed to weed out.

In summary, we conclude the trial court did not err by allowing Dr. Raphael's testimony as relevant, not unduly prejudicial, and not barred by Frye.

#### THE EGGHELL PLAINTIFF RULE

The eggshell plaintiff rule holds that a tortfeasor takes his victim as he finds him. Buchalski v. Universal Marine Corp., 393 F. Supp. 246, 248 (W.D. Wash. 1975). It is well established in Washington law. See, e.g., Reeder v. Sears, Roebuck & Co., 41 Wn.2d 550, 556-57, 250 P.2d 518 (1952). It is fair to regard Lindemann as an eggshell plaintiff because the evidence established that obesity is a recognized negative risk factor in car accidents.

Potential application of the eggshell plaintiff rule to Lindemann's claim initially emerged as an issue in connection with her motion in limine concerning Dr. Raphael. Lindemann argued that it would violate the eggshell principle to allow Dr. Raphael to testify that obesity was a cause of the critical pelvic injury. "If Dr. Raphael is right, it doesn't get Toyota off the hook, because they're still responsible because we had a person who had extra weight, and that caused an

additional injury.” Toyota responded that the eggshell plaintiff rule could not make Dr. Raphael’s testimony irrelevant. “It has to be that you talk about the crash forces involved, and then you evaluate whether or not the vehicle design caused her injuries. But the accident forces are the acceleration times the mass. That’s an equation.” Lindemann replied that there was no basis to exclude enhanced injuries from the eggshell plaintiff rule and that the plaintiffs would propose the standard instruction.

In denying the motion to exclude Dr. Raphael’s causation opinion, the trial court reasoned that the eggshell plaintiff rule does not apply to enhanced injury cases:

I think that the eggshell plaintiff rule doesn’t apply to enhanced injuries. It applies when you are talking about, you know, a standard tort, but not where you are talking about the injury being due not to what caused the accident but, rather, to the nature of the design of the vehicle.

On appeal, Lindemann attacks the trial court’s reasoning and argues that it produced two legally erroneous results: first, Toyota was able to use Lindemann’s obesity as a defense, and second, the court refused to give an eggshell plaintiff instruction.

As discussed above, the trial court properly concluded that Dr. Raphael’s use of Lindemann’s weight to determine the force the collision exerted on her was relevant and admissible. Contrary to Lindemann’s argument, Dr. Raphael’s testimony did not suggest that a passenger’s obesity is a defense when a design defect is found to exist, nor did it encourage the jury to think that Toyota had no duty to design cars that would be reasonably safe for obese persons.

Cases cited by Lindemann do not use the eggshell plaintiff rule to justify exclusion of relevant evidence of liability. The rule comes into play when the plaintiff proves that the defendant is liable for wrongful conduct and that conduct has caused at least some injury to the defendant. At that point, “the rule imposes liability for the full extent of those injuries, not merely those that were foreseeable to the defendant.” Benn v. Thomas, 512 N.W.2d 537, 539-40 (Iowa 1994).

A tortfeasor “may not escape or reduce damages by highlighting the injured party’s susceptibility to injury.” Primm v. U.S. Fid. & Guar. Ins. Corp., 324 Ark. 409, 414, 922 S.W.2d 319 (1996). Lindemann contends Toyota highlighted Lindemann’s obesity in order to escape or reduce damages. We disagree. Dr. Raphael’s testimony did not imply, nor did Toyota argue, that Lindemann’s predisposition to injury precluded Toyota’s liability for a defective design. The references to obesity were not accusatory. The trial court did not err in determining that Lindemann’s eggshell condition was not a basis for excluding the challenged testimony by Dr. Raphael.

Whether the trial court erred in failing to instruct the jury on the eggshell plaintiff rule is a different question. Jury instructions are sufficient when they allow counsel to argue their theory of the case, are not misleading, and when read as a whole properly inform the trier of fact of the applicable law. Anfinson v. FedEx Ground Package Sys., Inc., 174 Wn.2d 851, 860, 281 P.3d 289 (2012). Errors of law in a court’s instructions to a jury are reviewed de novo. Barrett v. Lucky Seven Saloon, Inc., 152 Wn.2d 259, 266, 96 P.3d 386 (2004). A court’s

omission of a proposed statement of the law will be reversible error when it prejudices a party. Barrett, 152 Wn.2d at 267.

Lindemann's proposed instruction was worded as follows:

If your verdict is for the plaintiffs, and if you find that: (1) before this occurrence Allyn Lindemann had a bodily or mental condition that was not causing pain or disability; and (2) the condition made Allyn Lindemann more susceptible to injury than a person without that bodily or mental condition, then you should consider all the injuries and damages that were proximately caused by the occurrence, even though those injuries, due to the pre-existing condition, may have been greater than those that would have been incurred under the same circumstances by a person without that condition.

See 6 WASHINGTON PRACTICE: WASHINGTON PATTERN JURY INSTRUCTIONS: CIVIL 30.18 at 324 (6th ed. 2012).

Lindemann asserts that she objected to the trial court's refusal to give her proposed instruction. Toyota does not dispute this. However, because the colloquy does not appear in our record, it is unclear if the instruction was rejected to be consistent with the court's earlier statement that "the eggshell plaintiff rule doesn't apply to enhanced injuries" or for some other reason. Lindemann's argument on appeal assumes the trial court categorically concluded that an eggshell plaintiff instruction is never appropriate in an enhanced injury case.

In responding, Toyota does not take the position that an eggshell plaintiff instruction would never be appropriate in an enhanced injury case. Rather, Toyota argues that the instruction was properly rejected because its wording was legally incorrect and, alternatively, that denial of the instruction, if error, was harmless.

The defect Toyota alleges in the proposed instruction is the language directing the jury to “consider all the injuries and damages that were proximately caused by the occurrence.” Toyota asserts that a jury would understand “occurrence” to mean the accident and might award a plaintiff damages for all damages sustained in the accident, not just the enhanced damages caused by whatever design defect the jury had found. This argument is unpersuasive. Other instructions made it manifestly clear that “occurrence” would have to mean the enhanced injury. The wording of the instruction would not have impaired the jury’s understanding that Lindemann was not to be compensated for injuries that she would have sustained if she had been in a safe car.

There is no apparent reason why an eggshell plaintiff instruction should not be given in an enhanced injury case. If the Lexus was defective and the defect caused at least some of Lindemann’s injuries by failing to protect her in the crash, it would make sense to instruct the jury to consider all of her enhanced injuries, even if they were greater than injuries that a person of normal weight would have incurred in the same circumstances.

Nevertheless, a trial court’s failure to give an appropriate instruction on a particular theory can be harmless error if the jury’s verdict clearly indicates that the evidence did not establish a necessary element of the theory. Boeke v. Int’l Paint Co., 27 Wn. App. 611, 615, 620 P.2d 103 (1980), review denied, 95 Wn.2d 1004 (1981). Here, an eggshell plaintiff instruction would not come into play unless the jury found Toyota liable for furnishing an unsafe product. The verdict form with its special interrogatories shows the jury did not find the Lexus to be

unsafe. Consequently, the jury did not reach the next question: whether the injuries Lindemann suffered in the crash were enhanced because the car she was driving was unsafe. Lindemann's attempt to show prejudice from the absence of the eggshell plaintiff instruction folds back into her general argument that Dr. Raphael's testimony was irrelevant and unfair—an argument we have rejected.

We conclude the trial court's refusal to give the proposed instruction, if error, was harmless.

The judgment on the verdict is affirmed.

WE CONCUR:

Sperman, C.J.

Becker, J.

Leach, J.