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*Daubert Scientific Evidence Standard*

**Daubert v. Merrell Dow Pharms, Inc., 509 U.S 579**

***Standard came from:***

In 1993 “Daubert v. Merrell Dow Pharmaceuticals, Inc.” the plaintiff, whose last name was Daubert, filed a lawsuit against a pharmaceutical company stating that their child’s birth defects were caused by one of the nausea medicines Bendectin of this pharmaceutical company that the mother had taken while being pregnant with the child. The plaintiffs used scientific evidence to support their claim in court. They presented expert testimony from the scientist who had conducted the study on this medicine, and they stated that this drug, Bendectin can cause birth defects in children if taken during pregnancy.

***Landmark Case:***

The main issue regarding this case was the fact that the expert testimony presented by the scientist who conducted the search should be admitted as evidence. Due to this case, the United States Supreme Court added this new Daubert as the new scientific evidence. It really shifted the approach to how the scientific studies regarding any case will be treated in the United States court. It changed the way the expert testimonies were accepted in the court. A new set of rules and standards was introduced. Now, courts would handle the expert testimonies in an unusual way as compared to how they would handle it before. The Daubert standard is applied to the admissibility of scientific evidence.

***Meaning and Testing:***

The testing using this standard works in the following way: first the testimony is presented in front of the judge, so he/she can evaluate the expert testimony before it is taken forward to the jury for evaluation and for it to be included in the trial. The judge examines the scientific methods that are used by the experts in the testing to see that they are capable of rigorous testing and if not, then the evidence is excluded from the trial. The judge also must ensure that the evidence provided is peer-reviewed by other experts before it is finalized and presented to the court before the jury. Not only that but also the methods should be published in authentic, reputable, and prestigious scientific journals and magazines. The judge performing the evaluation must ensure that the error rate in the testing methods is not high and that the methods do not lack established error rates because if they do then, the evidence is not reliable. The judge also must make sure that the presented evidence by the experts is consistent with the current set of scientific methods and accepted scientific principles. The judge also must make sure that the evidence is set up in a way that testing and potential refutation are allowed, making sure that the submitted evidence is open to inspection and alteration. Not just that, but the judge also must make sure that the scientist who performed the expert testimony is qualified enough, meaning that he/she should have a certain level of experience, education, and certifications in a specific field of knowledge. The judge needs to make sure that the presented evidence meets the criteria described in the Daubert standard requirements. The judge ensures that only accurate and precise information is presented in front of the jury. The evidence needs to be reliable and relevant to ensure the trial goes in the right direction without any delays related to the expert testimonies. If the scientific evidence fails to meet all the Daubert standards, then the evidence will not be allowed to be presented in court because unreliable evidence can affect the decision of the jury.

***Sample Case:***

I chose the “Daubert v. Merrell Dow Pharmaceuticals, Inc.” case because it has a significant outcome on the establishment of the Daubert standard. The standard was used for the admissibility of scientific evidence in federal courts. The claimants, Mr. And Mrs. Daubert, filed a lawsuit against the company Merrell Dow Pharmaceuticals, Inc. The couple claimed that their child had birth defects because of one of the medicines that the mother took while pregnant. She took the Bendectin medication for nausea during her pregnancy. More than 33 million women took that medication while pregnant, and many children that were born that year had birth defects. Mr. and Mrs. Daubert filed a lawsuit against Merrell Dow Pharmaceuticals, blaming the company for their child’s birth defect. They presented scientific evidence to the court in front of the jury in which they claimed that this medicine caused the birth defect in their child. Later, the company proved that the evidence presented was not accurate even though it did meet the Frye standards, but it did not meet the Daubert standards.

***Significant outcome:***

As a result of this case, the court decided to use Daubert standards for the scientific studies evidence being presented in the court. The court no longer used the Frye standard for evidence that would be used in the case. The Frye standard did not include any kind of special testing, peer review, consistency, etc. The Frye standard was just the general acceptance of the scientific evidence, after this case the court changed the admissibility requirements and started using the Daubert standard which means that specific scientific methods and approaches should be used on the evidence before it is presented in the court. The Daubert decision overruled the common law Frye test for admitting scientific testimony. Daubert opened the door for new techniques both scientific and otherwise to be used in federal cases. The Daubert standard included many factors like certain testing, peer review, error rates, consistency, and current scientific knowledge. They presented scientific evidence to the court in front of the jury in which the couple claimed that this medicine caused the birth defect in their child. Later, the company proved that the evidence presented was not accurate even though it did meet the Frye standards, but it did not meet the Daubert standards. The expert testimony presented in the court by the couple was all based-on testing performed on animals and other things. The evidence did not include any written reports or studies conducted by qualified scientists. The evidence presented by the expert testimony was not reliable and accurate. The Daubert standard shifted the legal and scientific approach to evidence presented in the court. It introduced a more flexible and structured approach to the relevance of scientific evidence. Now the scientific evidence is handled differently in federal courts.

***Case Information:***

The claimants, Mr. And Mrs. Daubert, filed a lawsuit against the company Merrell Dow Pharmaceuticals, Inc. The couple claimed that their child had birth defects because of one of the medicines that the mother took while pregnant. She took the Bendectin medication for nausea during her pregnancy. More than 33 million women took that medication while pregnant and many children that were born that year had birth defects. Mr. and Mrs. Daubert filed a lawsuit against Merrell Dow Pharmaceuticals blaming the company for their child’s birth defect. They presented scientific evidence to the court in front of the jury in which they claimed that this medicine caused the birth defect in their child. The district court decided after reviewing the extensive published scientific work. The court said that the drug Bendectin did not cause any birth defects in the child. The couple presented the testimony of eight well-credentialed experts in the court. The evidence was based on the fact that Bendectin can cause birth defects in animal studies. The court determined that the evidence did not even meet the general acceptance. The court stated that the evidence needs to meet the general acceptance to be admissible to the court.

***Scientific evidence:***

Epidemiological studies were conducted on the medication to show that Bendectin caused birth defects in the child. Epidemiological studies examine the patterns and factors related to diseases in people. These studies were conducted to investigate whether there was a relation between this nausea medicine's use and the drug used for it that caused the birth defects. The evidence was trying to establish a link between the use of the medication by the mother and the incidence of birth defects. Studies have shown that there is a connection between the two factors.

***Point to be proven:***

They presented scientific evidence to the court in front of the jury in which they claimed that this medicine caused the birth defect in their child. They proved that the medication caused very harmful effects on fetal development and these studies backed up the argument presented by the couple. This scientific evidence was the main point in the case because it was proving the pharmaceutical company guilty of selling medications that can cause birth defects in children if the mother takes them while pregnant. The district court decided after reviewing the extensive published scientific work. The court said that the drug Bendectin did not cause any birth defects in the child. The couple presented the testimony of eight well-credentialed experts in the court. The evidence was based on the fact that Bendectin can cause birth defects in animal studies. The court determined that the evidence did not even meet the general acceptance. The court stated that the evidence needs to meet the general acceptance to be admissible to the court. The evidence proved that Bendectin contributed to the child's birth defects. The mothers, while pregnant, took those medications for morning sickness and it resulted in disabilities and other diseases in their children. So according to the claimants these points were enough to prove that the pharmaceutical company was responsible for their child’s birth defects.

***Result of the application:***

This case resulted in the change of admissibility criteria for the scientific evidence presented in the court. The old Fry standard was no longer accepted in this case and eventually, the courts used the new standard known as the Daubert standard. The standard was used to present scientific evidence in federal courts. Due to this case, the United States Supreme Court added this new Daubert as the new scientific evidence. It really shifted the approach to how the scientific studies regarding any case will be treated in the United States court. It changed the way the expert testimonies were accepted in the court. A new set of rules and standards was introduced. Now, courts would handle the expert testimonies in an unusual way as compared to how they would handle it before. The Daubert standard is applied to the admissibility of scientific evidence. As a result of this case, the court decided to use Daubert standards for the scientific studies evidence being presented in the court. The court no longer used the Frye standard for evidence that would be used in the case. The Frye standard did not include any kind of special testing, peer review, consistency, etc. The Frye standard was just the general acceptance of the scientific evidence. After this case, the court changed the admissibility requirements and started using the Daubert standard, which means that specific scientific methods and approaches should be used on the evidence before it is presented in the court. The Daubert decision overruled the common law Frye test for admitting scientific testimony. Daubert opened the door for new techniques, both scientific and otherwise, to be used in federal cases. The Daubert standard included many factors like certain testing, peer review, error rates, consistency, and current scientific knowledge.

***Evidence Not Admitted:***

The scientific evidence presented by the couple was not admitted to the court because it did not meet the Daubert standard for scientific evidence admissibility. Also, the studies that were conducted on the evidence were epidemiological studies, meaning they did not meet the standard described by the Daubert standard. The decision not to admit the evidence was important because it meant the claimants could not prove their claim in court that the pharmaceutical company’s medication caused birth defects in the child that was born. They could not support their claims and bring proper proof to the court before the jury. The court found out that the evidence did not meet the criteria necessary for it to be considered for trial. The evidence lacked reliability and relevance. The ruling in this case had a significant impact on the federal court rules and regulations. The evidence lacked special methods, qualifications, and testing required for it to be considered in the court. The evidence was based on some studies done by eight expert scientists. The evidence was based on the fact that Bendectin can cause birth defects in animal studies. The court determined that the evidence did not even meet the general acceptance. The court stated that the evidence needs to meet the general acceptance to be admissible to the court. When the judge went through the evidence and performed all the necessary testing. The Daubert standard played a vital role in the admissibility of the scientific evidence to the court in this case. The district court decided after reviewing the extensive published scientific work. The court said that the drug Bendectin did not cause any birth defects in the child. The couple presented the testimony of eight well-credentialed experts in the court. The evidence was based on the fact that Bendectin can cause birth defects in animal studies. The court determined that the evidence did not even meet the general acceptance. The court stated that the evidence needs to meet the general acceptance to be admissible to the court.

***Admission or non-admission:***

The scientific evidence was not admitted to the court because of its lack of specific methodology, qualifications of the scientists, reliability, and relevancy. This case resulted in the change of admissibility criteria for the scientific evidence presented in the court. The old Fry standard was no longer accepted in this case and eventually, the courts used the new standard known as the Daubert standard. The outcomes of the case are the following: The non-admission affected the outcome, and it changed the decision of the court and the jury. The plaintiffs were able to present their evidence in court, but they were now faced with more challenges regarding the evidence's credibility. They had to present evidence in court that could pass the Daubert standards. They had to prove that the nausea medicine caused the defects in their child at birth. The plaintiffs could not support their claims because their evidence was not credible, meaning it did not meet the standards required by the court. They lacked the evidence that could help them in the court prove their claims and win the case. It really did change the fate of the case in court. The couple did not have any proof to support their argument and strengthen their case. The outcome of this case really set a legal standard on how and what evidence should be present in front of the jury in the court. It emphasized the importance of Daubert standards in the federal court while dealing with the scientific evidence presented in any kind of case to the jury. Now scientific evidence is handled differently in courts as compared to how it used to be handled. This case brought up the need for a more specific methodology when it comes to scientific evidence. The evidence should be reliable for it to be presented in front of the jury. The decision not to admit the evidence was important because it meant the claimants could not prove their claim in court that the pharmaceutical company’s medication caused birth defects in the child that was born. They could not support their claims and bring proper proof to the court in front of the jury. The court found out that the evidence did not meet the criteria necessary for it to be considered for trial. The evidence lacked reliability and relevance. The ruling in this case had a significant impact on the federal court rules and regulations. The evidence lacked special methods, qualifications, and testing required for it to be considered in the court. The evidence was based on some studies done by eight expert scientists. The evidence was based on the fact that Bendectin can cause birth defects in animal studies. The court determined that the evidence did not even meet the general acceptance. The court stated that the evidence needs to meet the general acceptance to be admissible to the court. The result of this case increased the scrutiny of the scientific evidence in the legal cases in court. Now, the court was no longer accepting the general acceptance standard called the Frye standard for such cases in the federal courts. This new standard affected the decision for future cases that involved scientific evidence. The case also highlighted how important it is to have expert witness testimonies. It is required for the scientists' performing actions on the evidence to have a certain level of knowledge, and experience, and be familiar with specific methods before they produce any conclusion and present it to the court. The expert testimonies need to meet a high standard of scientific rigor and all expert testimonies should be able to meet the required standards for it to be considered in court hearings and proceedings.

***Computer or digital evidence case:***

The Daubert standard is applied to many court cases involving computer and digital forensics and evidence. It is also used in the evaluation of scientific evidence used in trials in courtrooms. To maintain the reliability of scientific evidence the Daubert standard is used in computer forensics, electronic records, and data analysis. All the methods that are used in collecting and analyzing digital evidence should meet the Daubert standard. All the experts who are involved in expert testimonies of digital evidence need to be highly qualified to perform their testing on the collected digital evidence. If digital evidence is involved, the judge must ensure that the people, whose expert testimony is used in the court, are all computer and digital forensics experts with certain knowledge and experiences in their field because that way they are able to provide us with reliable information. The testing that needs to be performed on the digital evidence includes many complex technical tasks. Data recovery, encryption analysis, and cyber security investigations are all part of the investigation process. Daubert standards are used to find out whether the performed methods will work with the evidence and, we can find out whether there are any errors in the methods being used on the provided evidence. All the digital evidence and analysis needs to be consistent with today's established principles. Digital forensics and cyber security departments' new techniques should be consistent with the methods being used during the processing of evidence. There should be high scrutiny when there are digital evidence techniques involved. The techniques should meet exact standards requirements for ensuring reliability and relevancy. Daubert standard helps in dealing with digital evidence in legal matters.

In conclusion, the Daubert standard is applied to digital evidence that is presented in court. It ensures the submitted evidence is admissible in the court from the jury and it meets all the specifications of the Daubert standard. It ensures the reliability and admissibility of the evidence in the court. It focuses on the qualification of expert witnesses, testability, and consistency with the established principles. It really shifted the approach to how the scientific studies regarding any case will be treated in the United States court. It changed the way the expert testimonies were accepted in the court. A new set of rules and standards was introduced. Now, courts would handle the expert testimonies in an unusual way as compared to how they would handle it before. The Daubert standard is applied to the admissibility of scientific evidence. The use of this standard in the digital and forensic realm shows us the need for more rigorous and scientific to assess the validity of computer and digital evidence.

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