

## **Question: What is Junk Science and why does the prosecution rely on it?**

You heard us talking a lot about junk science.

What is junk science? Well everybody has a different idea, but the hallmarks of junk science are two things, causism and hyper-claiming. What is causism, c-a-u-s-i-sm, causism is inferring a cause when no causal relationship actually exists. For example, it was one time believed that because the child had erythema of the vestibule, sex abuse has happened here. That's implying a cause, sex abuse, for the symptom, erythema of the vestibule, or because Jonny has a spinal fracture child abused has happened here. That's implying a cause when no cause or relationship necessary exists.

We see in the newer research that claims such as these have been thoroughly researched and the causistic or the junk science underpinnings of some of those claims have come to light.

What is hyper-claiming? Hyper-claiming is going too far with data. For example, probably one of the best examples of hyper-claiming is the child sexual abuse accommodation syndrome. Roland Summit saw a number of children about whom allegations of sexual abuse have been made and he noticed similarities. He noticed that the children often seemed helpless, he noticed that the children often seemed to retract statements of allegations that they have made, he noticed a variety of symptoms that you would expect in children who were quite anxious.

Dr. Summitt said that his experience caused him to believe that if children exhibited these symptoms, it showed that sexual abuse had happened. He later denied that this was his intention. Because of this population he believed you can generalize that these symptoms indicates sexual abuse has happened. This is hyper-claiming. This is generalizing from two small a sample.

Junk Scientists do not know the importance of numbers, namely lots and lots of people in a sample from which we can generalize. Junk Scientists don't understand the issue of base rates. They fail to learn that all of these kinds of symptoms or signs actually occur in the general population. They don't know the difference between incidents and prevalence. This lack of knowledge of scientific standards is hallmarks of the junk scientist. They are there to make a claim.

The junk scientists gets an idea about what's happened and then works very hard to get data to support that idea. That's called pursuing a single hypothesis. They ignore all data to the contrary. They are driving down one road.

The child sexual abuse accommodation syndrome is a classic example of junk science. All roads lead to the conclusion that the allegations are true. These are the hallmarks of junk science.

There is more information about junk science in a book that my co-author Dr. Campbell and I wrote for judges, it's called the Benchbook in Behavioral Science. We spent a great deal of time trying to educate judges as to how to determine what is good science and what is bad science. Causism, hyper-claiming and then if you want to get a little bit more in to detail, validity and reliability.