YOU ARE RELIEVED AT YOUR ADHD DIAGNOSIS, and finally have an explanation for why life has been so difficult for you. Now that you are receiving treatment, you are grateful that your daily functioning is more satisfying and productive. While you are watching television one night, a nationally broadcast program features a neurologist who states ADHD is not a real medical condition. He explains that the “dangerous and toxic medications” prescribed are unnecessary in ninety percent of patients. You are well informed, so you smile and change the channel. However, if you’re prone to anxiety or didn’t receive enough information from your doctor, your opinion quickly changes and you question the need to take “dangerous and toxic drugs.”

In the last ten years, ADHD in children and adults has received a great deal of media coverage and public attention. With an increasing number of children, adolescents, and adults being diagnosed, the prescription rate of stimulant medications has increased substantially. The availability of stimulants in the community has led some to conclude there is an increased rate of misuse and abuse of these medications. While this is a legitimate public health concern, it needs to be balanced by the benefit received from such treatment. There is a lot more to this story.

The debate over the validity of ADHD and ADHD treatments, specifically stimulant medications, may distress advocates for ADHD who proclaim that the research is irrefutable. However, I welcome any discussion, as it provides ADHD experts the opportunity to highlight the most recent U.S. and international research that moves the science of ADHD forward.
Three elements of engaging stories

The construction of an engaging story incorporates three critical elements: It will include victims, villains, and heroes. By design, the story will provoke moral questions of right and wrong. Mary Horton-Salway, PhD, from the United Kingdom, summarizes this concept very well:

Extreme polarised representations of ADHD are used to construct moral panics about public safety and the risks presented by dangerous adult males with ADHD, warning of the dire consequences of neglecting to medicate boys with ADHD. Alternatively, they warn of the social consequences and dangers of labeling and medicating naughty boys. The most worrying aspect of these stories is that their arguments may not be based on the results of the very same research study they are citing.

These moral positions then become the foundation for advocacy and pursuing “social justice.” Look for this dynamic played out in political speeches. However, when advocacy is passion based on moral rightness but without scientific evidence, unintended consequences will result. Passion without evidence becomes blind advocacy that can be easily manipulated. So, moral rightness (“what’s fair”) plus passion (personal investment) can leave you vulnerable to being manipulated into taking an action you might have otherwise reconsidered if you had more information. The manipulator deliberately withholds that information while inflaming passions to act quickly. Understanding these concepts allows you to make a more thoughtful review of any news story.

Given that controversy makes for a good story, there are three “arguable causes” for ADHD:

- **SOCIAL:** The environment causes the behavior, so change the environment.
- **PSYCHOLOGICAL:** The person causes behavior, so change the person.
- **BIOLOGICAL:** The “chemical imbalance” causes the behavior, so change brain chemistry.

Remember, I mentioned the critical construct for the story: victims, villains, and heroes. Now let’s see how these three characters play out in each of the three “arguable causes” for ADHD.

Let’s begin with the social cause. With this argument, we might say that the victims are the children and parents who get duped into believing the behavior is the result of a psychiatric disorder. The villains may be the teachers who insist on treating the behavioral disruptions and the doctors who prescribe unnecessary medication. The heroes are those who wish to save the victims by providing “education” on the “dangerous medications” and the profit motive of pharmaceutical companies.

Another way to construct the story is to make the children and doctors the victims. In this scenario, the children are the victims of medication and pharmaceutical companies are duping the doctors. The villains may be the parents and teachers who are described as seeking easy answers (medications) to complex situations. The heroes remain those who would save us with “information and insights that no one tells you.”

Let’s look at the second “arguable cause” for ADHD, the psychological. In this story the parents and teachers are the victims of the child’s disruptive behavior. The child is seen as the villain whose behavior distresses everyone around him. In this story, the child’s behavior is interpreted as motivated. That is to say that he or she is lazy, uncaring, uninterested, selfish, or incapable (“dumb”). The heroes are those who offer “therapies” to deal with the recalcitrant child. The hero offers well-intended “therapy” citing personality, parenting, and psychological issues. While the hero’s explanation may be quite seductive and agreeable, ultimately the “therapy” is sub-optimally effective because it fails to recognize ADHD is a psychiatric disorder with neurochemical underpinnings.
The third “arguable cause” of ADHD is biological. Here the victim is a child or adult with ADHD who suffers at the hands of his genetics and neurochemistry. “Your life will be a disaster and there is nothing you can do.” The villains are seen as all those who offer broader explanations for the causes of ADHD, namely other medical and environmental factors. They are painted as those who would keep you from getting your necessary medication. The heroes in this story are the doctors and the pharmaceutical companies who have developed and prescribe the much-needed medication to “cure your ills.”

You can see how it is possible to construct a compelling story about ADHD combining the elements of victims, villains, and heroes into one of the three “arguable causes” for ADHD. Your conclusion in reading the article will be greatly influenced by how the writer portrays the players and represents the causes of ADHD.

**Impact on readers and public**

While journalists construct their stories and appease their editors, their stories have a tremendous impact on readers and the general public. The media have been accused of misrepresenting ADHD and misleading the public. Sometimes this is done quite innocently. Journalists like to cite the findings of the latest research, often with a positive finding for specific treatment. Thereafter the reader is left with the impression that specific treatment is highly effective. Unfortunately, and more often than not, this may not be the case. The article may have left out data from a similar study showing the treatment was ineffective. Simply put, you see one positive trial result but are not informed of the four trials that didn’t work. If you knew that information it would change your conclusion about the treatment’s benefit. The media realizes that stories ending with “wait and see” will not intrigue their viewers and readers.

This concern has recently been addressed in two research publications. In France, Francois Gonon, PhD, and colleagues looked at forty-seven scientific publications on ADHD in the 1990s that generated 347 newspaper articles. They looked at the top ten most-echoed (most cited in articles) publications. Then they collected all of the relevant subsequent published research studies until 2011. They found that of the ten most-echoed publications, seven studies investigated a new treatment. However, of subsequent studies with this treatment, six were later refuted or had a large number of questions, and one was neither confirmed nor refuted. Of the remaining three most-echoed publications, they were repeated studies, and two of the three were confirmed as effective. Gonon’s paper suggests that reservations about new treatments would be prudent. In other words, wait for more research about new treatments. While this may be difficult to do when ADHD is affecting you or your family, it is important to allocate your treatment dollars first on those treatments proven to be effective.

The second study from France looked at the accuracy of television reporting from 1995 to 2010 on three scientific questions related to ADHD:
- Is ADHD a genetic or inherited disorder?
- Has use of stimulant medication really decreased the risk of academic underachievement?
- Are brain imaging techniques able to reveal ADHD?

While the scientific evidence developed over the course of these sixteen years, the authors note that nine out of ten television programs broadcast between 2007 and 2010 still expressed opinions that ran against the current scientific consensus. They wrote, “The failure of TV programs to reflect the evolution of the scientific knowledge might be related to a biased selection of medical experts.” In other words, the expert selected by the journalist may have an opinion that is in keeping with the editor’s/producer’s opinion while of questionable scientific accuracy.

Informational articles and media broadcasts will, at best, be limited in scope and depth. At worst, they will have an editorial agenda that selectively parses information to substantiate the perspective of the journalist and/or editor. In that regard, such media pieces are
not educational but opinion editorials. In the age of the Internet, it becomes increasingly more difficult to discern the source of information and its accuracy. What happens to those who don’t have the time or knowledge to understand these invisible prejudices in news pieces that may be delivered as new and noteworthy?

My goal is to instruct you on how to distinguish between balanced information and biased reporting. If all else fails, I leave you with this caveat: The credibility of the information depends on the intent of the journalist or publication. The first question you ask yourself is: Can I discern the news story’s intent? Having read this article, your answer is “better now.”

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ADDITIONAL READING
Francois Gonon et al. “Why Most Biomedical Findings Echoed by Newspapers Turn Out to be False: the Case of Attention Deficit Hyperactivity Disorder,” in PLOS ONE, September 2012;7(9).