

ADHD
AWARENESS MONTH
OCTOBER 2019

ADHD MYTHS AND FACTS
KNOW THE DIFFERENCE

Myth: ADHD Doesn't Exist

Fact: here are more than 100,000 articles in science journals on ADHD (and its precursor labels) and references to it appear in medical textbooks going back to 1775.

Russell A. Barkley, Ph.D.
Virginia Commonwealth University Medical Center
Richmond, VA USA 23235

We periodically hear in the mainstream media that some pundit, expert, or celebrity has declared ADHD to be a myth. That was even the name of a trade book that Richard Saul published a few years ago. This nonexistence of ADHD is often uttered with great confidence, yet nothing could be further from the truth. When I hear people say this, I wonder about their real motives for saying so. After all, there are more than 100,000 articles in science journals on ADHD (and its precursor labels) and references to it can be found in medical textbooks going back to 1775. It's possible, then, that someone making this claim of ADHD's nonexistence is simply demonstrating their ignorance or illiteracy of the science of the disorder. They simply don't know what they are talking about and don't really want to know either. If they did, they would have shown a modicum of motivation and gone on the Internet using Google Scholar and searched the science journals. It's easy to forgive such ignorance

and understand the intellectual laziness behind it.

More often than not, however, such critics of ADHD have a political or religious agenda. Declaring ADHD to be a myth serves some other purpose that requires that the public be intentionally misled by the declarant – they engage in propaganda. Their motives for misleading the public require them to intentionally deceive others and thus can be construed as not just nefarious but frankly evil (intent to harm the innocent).

For to say that ADHD does not exist in an honest intellectual debate is to presume that one has a set of standards for what real mental disorders must measure up to in order to be recognized as existing. And that one has then gone about the mental heavy lifting of examining the available scientific evidence to see if the resulting findings meet those criteria for constituting a real disorder. But that is not what these critics are about, for when they are

challenged to produce the criteria they are using to define a mental disorder as real or not, they can offer none or at least any that have any persuasive value. But mental health science has such standards and they are useful for us to examine here. I personally prefer the explicit criteria set forth by Jerome Wakefield, Ph.D. more than 20 years ago but they are similar enough to others used in the field far longer to fairly represent the standards often employed in the field of mental health.

Real disorders: (1) consist of a failure or serious deficiency in the functioning of a mental ability that is universal across people (a mental adaptation) and (2) this failure or deficiency is producing harm to the individual. It's that simple. Do those with ADHD we claim to have a disorder show evidence of having a significant deficit in a mental ability found in typically developing people? If so, is that deficiency of such a magnitude as to result in harm to the individual. We can show that ADHD meets both of these standards.

Let's take the first one above – that there must be evidence that a mental ability (or set of abilities) that is typical of people is failing or substantially deficient. In the case of ADHD, there is overwhelming evidence that ADHD involves a serious deficiency in both a type of attention (poor sustained attention and distractibility) and behavioral inhibition (impulsivity and hyperactivity). We know that these are universal and dimensional traits or abilities in all people who develop normally and we have thousands of studies showing that they are deficient in ADHD, which represents the extreme end of these normal continua. But there is more going on underneath these obvious problems with mental functioning in ADHD. As I and many others have argued elsewhere, these more superficial or surface symptoms of ADHD actually reflect an underlying

problem in the development of executive functioning (EF). All typical people have a prefrontal lobe network, or executive brain, and it provides those executive mental abilities necessary for goal-directed, future-oriented action: self-awareness, inhibition, working memory, emotional self-regulation, self-motivation, and planning/problem-solving. Those mental abilities give us self-regulation. The traditional symptoms of ADHD arise from and are highly correlated with deficiencies in these mental abilities. Moreover, there is also indisputable evidence now from hundreds of research studies involving various methods of neuro-imaging that ADHD is routinely associated with mal-development, disturbed and often erratic functioning and impaired functional connectivity in regions and networks involving the executive brain; chiefly the prefrontal cortex. Thus, whether you subscribe to the view that ADHD is a disorder of EF or adhere more closely to the diagnostic conceptualization of ADHD as a disorder of inattention and inhibition, the evidence supports the fact that those symptoms reflect a failure or serious deficiency in the functioning of a set of mental mechanisms that are common to all typical people. Criterion number 1 has been met.

Is it associated with harm to the individual? Harm as noted earlier refers to an increased risk of mortality (death), morbidity (injury), personal suffering (a markedly reduced quality of life), or impairment in major domains of life activities essential to our survival and welfare. Those domains include family and social functioning, education, occupational functioning, financial management, sexual functioning, child rearing, and dating, marriage or intimate cohabiting, among other adult major life activities. Only one of these harms needs to be established scientifically to meet our standards. In the case of ADHD all of them are found to occur

at a higher risk than would be expected in typical people. The disorder has been shown repeatedly in the past decade to be linked to an increased risk of early mortality, that risk being nearly double the risk in typical children before age 10 and being more than 4 times the risk of early death in adults before age 45. Furthermore, a study by my colleagues and I published in 2019 shows a 9-13 year reduction in estimated life expectancy even in early adulthood.

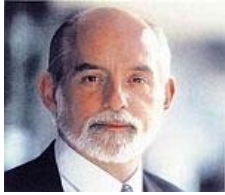
Or our criteria require that ADHD result in increased morbidity. As countless studies have now shown, ADHD is a disorder having the greatest risk for accidental injuries of all types, which is usually the reason for the greater risk for early mortality in children and adults. People with ADHD have 3-5 times the risk for accidental injury, and a higher risk for repeated injuries, visitation to the hospital emergency room, and hospitalization than do typical children or those having other disorders.

Even if ADHD did not predispose to greater mortality or morbidity, abundant research shows the myriad major life activities in which people with ADHD function so ineffectively that it results in impairment, which is to say adverse consequences accrue to them as a result. Impairment reflects evidence that the environment is kicking back as a consequence of the manifestation of ADHD related symptoms. There are few outpatient mental disorders more severely impairing, impairing to more people, and across more domains of major life activities than does ADHD. As you can see, ADHD handily meets both standards

for being a valid mental disorder. Thus ADHD is real.

Sometimes critics jump to the ridiculous claim that ADHD cannot be real because one has to have some objective laboratory test of a disorder for it to be real or valid. This claim is absurd; there is no laboratory test for any mental disorders or for many medical ones for that matter, even for common complaints such as headache, backaches, stomachache, various forms of pain not to mention the early stages of Alzheimer's, multiple sclerosis, lupus, etc. Nowhere in medicine or mental health do we find that for disorders to be accepted as real laboratory tests must exist for them. To claim otherwise is to grossly misrepresent the history of these scientific fields. The absence of a test hardly means the absence of a disorder. Disorders are primarily discovered first by describing the symptoms that are believed to comprise that condition and showing that they consistently cohere (cluster together routinely). Then scientists search for the causes that contribute to those symptoms. Only then, years or even decades later, when evidence concerning etiologies is well established is clinical science able to discover some essential objective means of routinely testing for it or them. Critics have placed the cart before the horse or more often their ass above their heads – symptoms and real disorders precede the identification of lab tests, not the inverse. In sum, to call ADHD a myth is to indicate prima facie that one is ignorant of science or that one intends to intentionally mislead the listener for some nefarious purpose, as in propaganda. Neither is flattering, and we should not suffer such fools gladly.

ABOUT THE AUTHOR



Russell A. Barkley, Ph.D. is a clinical scientist, educator, and practitioner who has published 23 books, rating scales, more than 290 scientific articles and book chapters related to the nature, assessment, and treatment of ADHD and related disorders, and clinical manuals numbering 41 editions. He is a Clinical Professor of Psychiatry at the Virginia Treatment Center for Children and Virginia Commonwealth University

Medical Center, Richmond, VA. His websites are www.russellbarkley.org and ADHDLectures.com.

References

- Barkley, R. A. (2015). Health problems and related impairments in children and adults with ADHD. In R. A. Barkley (ed.) *Attention deficit hyperactivity disorder: A handbook for diagnosis and treatment (4th Ed)*(pp. 267-313). New York, NY: Guilford Press.
- Barkley, R. A. (2015b). Educational, occupational, dating and marriage, and financial impairments in adults with ADHD. In R. A. Barkley (ed.) *Attention deficit hyperactivity disorder: A handbook for diagnosis and treatment (4th Ed)*(pp. 314-342). New York, NY: Guilford Press.
- Barkley, R. A. & Fischer, M. (2019). Hyperactive child syndrome and estimated life expectancy by young adult follow-up: The role of ADHD persistence and other potential predictors. *Journal of Attention Disorder, 23*(9), 907-923.
- Barkley, R. A., Murphy, K. R., & Fischer, M. (2008). *ADHD in adults: What the science says*. New York: Guilford Press.
- Dalsgaard, S., Ostergaard, S. D., Leckman, J. F., Mortensen, P. B., & Pedersen, M. G. (2015). Mortality in children, adolescents and adults with attention deficit hyperactivity disorder: a nationwide cohort study. *Lancet, 385*, 2190-2196.
- Faraone, S. C., Asherson, P., Banaschewski, T., Biederman, J., Buitelaar, J. K., Ramos- Quiroga, J. A. et al. (2015). Attention-deficit/hyperactivity disorder. *Nature Reviews (Disease Primers), 1*, 1-23.
- Frazier, T. W., Demareem H. A., & Youngstrom, E. A. (2004). Meta-analysis of intellectual and neuropsychological test performance in attention-deficit/hyperactivity disorder. *Neuropsychology, 18*, 543-555.
- Hervey, A. S., Epstein, J. N., & Curry, J. F. (2004). Neuropsychology of adults with attention-deficit/hyperactivity disorder: A meta-analytic review. *Neuropsychology, 18*, 495-503.
- London, A. S., & Landes, S. D. (2016). Attention deficit hyperactivity disorder and adult mortality. *Preventive Medicine, 90*, 8-10.
- Nigg, J. T. (2013). Attention-deficit/hyperactivity disorder and adverse health outcomes. *Clinical Psychology Review, 33*, 215-228.
- Wakefield, J. C. (1999). Evolutionary versus prototype analyses of the concept of disorder. *Journal of Abnormal Psychology, 108*, 374-399.