

Anti-Science? "You Keep Using That Word. I Do Not Think It Means What You Think It Means."

Special – Zoey O'Toole
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Talking Points

Unlike what society and the media like to believe, questioning vaccines isn't "anti-science." Philosopher Thomas Kuhn's "main idea is that scientific understanding is not simply a gradual accretion of knowledge, but is instead more episodic in nature with periods of 'normal science,' 'puzzle-solving' guided by the prevailing paradigm, punctuated by periods of 'revolutionary science' as an old paradigm gives way to one that better explains the totality of observed phenomena." (p. 20) Is questioning vaccination "revolutionary science"? Is the old paradigm giving way to one that better explains the totality of observed phenomena?

Pathways is always talking about the "shift" ("the shift to conscious choice," "shift happens," "paradigm shift," "the tipping point," ...). We're working towards this "paradigm shift;" this shift is what ushers in a scientific revolution where there are explosions of new ideas and directions for research. It doesn't just have to do with vaccination; it has to do with everything.

It can be hard to think outside of an idea. Science knows this. The scientific method—"a body of techniques for investigating phenomena, acquiring new knowledge, or correcting and integrating previous knowledge" (Wikipedia)—has evolved to try and counteract confirmation bias—"the tendency to look for and see only evidence that confirms what they already believe." (p. 21) As humans, we are subject to biases. Peer review is supposed to hold scientists in check. The problem is, the peer review system is seriously flawed, even Richard Smith, former editor of the *British Medical Journal* thinks so and wrote about it in 2006. "Marcia Angell, M.D., former editor in chief of the *New England Journal of Medicine*, believes that problems with scientific research, especially pharmaceutical research, go much deeper than peer review." (p. 21) Pharmaceutical companies back a lot of major academic research. Do you think that's a conflict of interest?

There is research we believe and research we don't. The system itself is untrustworthy. What are we as parents supposed to believe? We have a tool that we should always be using. Our intuition. This is a

system we each have, we can always trust and always ask for help. Denying an intuition just because science hasn't proven it to be a problem could be one of the biggest mistakes we ever make.

People are skeptical of the “revolutionary science” that is surfacing on vaccines and GMOs. What they don’t seem to be skeptical of is that a majority of the science “proving their safety” is conducted by the manufacturers themselves or the CDC. Vaccines are seriously profitable, why stop it? When it comes to GMOs their safety studies are conducted by Monsanto and rubber-stamped by the FDA. Do we see a trend happening?

Resources

Full references for each article are available at <http://pathwaystofamilywellness.org/references.html>

Article referenced throughout “Anti-Science?”: “Why Do many Reasonable People Doubt Science?” by Joel Achenbach <http://ngm.nationalgeographic.com/2015/03/science-doubters/achenbach-text>

“Peer Review: A Flawed Process at the Heart of Science and Journals” by Richard Smith
<http://jrs.sagepub.com/content/99/4/178.short?rss=1&ssource=mfr>

“The Hard Science of Supporting Low-Tech Birth” by Alice Dreger
<http://pathwaystofamilywellness.org/Pregnancy-Birth/the-hard-science-of-supporting-low-tech-birth.html>

“Moms In Charge Presents Dr. Andrew Wakefield on CDC Whistleblower” by Anne Dachel
<http://www.ageofautism.com/2015/05/moms-in-charge-presents-dr-andrew-wakefield-on-cdc-whistleblower.html#more>