

SPOTTED

Valproate ban; hearing voices; adult autism and more

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Valproate ban

Prenatal exposure to the drug valproate is among the few environmental factors with a **strong link to autism risk**. Now France has **banned the use of some versions of sodium valproate during pregnancy**. The banned products are Depakote and Depamide, both used for bipolar disorder. The products used for **epilepsy** are not included in the ban, *The Lancet* reported on 15 July.

Dominique Martin, director-general of the European Union's drug watchdog agency, expressed a hope that all of the other 27 European Union countries will follow France's lead by 2018. The EU's official risk-assessment committee has already advised clinicians to avoid prescribing valproate to women of childbearing age, except as a last resort, *The Lancet* reports. The group estimates that up to 40 percent of preschool-aged children who were exposed to valproate in the womb have "developmental problems" and says that the exposure carries a fivefold increase in autism risk.

SOURCES:

The Lancet / 15 Jul 2017

France bans sodium valproate use in case of pregnancy

<http://www.sciencedirect.com/science/article/pii/S0140673617318664>

Sex-biased struggle

Compared with boys on the spectrum, **girls with autism struggle more with day-to-day tasks**, according to a study published 2 June in *Autism Research*. Investigator **Lauren Kenworthy** of Children's National Health System in Washington, D.C., said in a 13 July statement that because autism research **focuses "overwhelmingly" on males**, identifying these sex-specific gaps is

critical to helping girls with the condition.

SOURCES:

Children's National Health System / 13 Jul 2017

Females with autism show greater difficulty with day-to-day tasks than male counterparts

<https://childrensnational.org/news-and-events/childrens-newsroom/2017/females-with-autism-show-greater-difficulty>

Autism Research / 02 Jun 2017

Sex differences in parent-reported executive functioning and adaptive behavior in children and young adults with autism spectrum disorder

<http://onlinelibrary.wiley.com/doi/10.1002/aur.1811/full>

Hearing voices

Autism advocates have spearheaded the neurodiversity movement, which emphasizes accepting neurobiological differences. Given the **reverse-image relationship between autism and schizophrenia**, perhaps it's logical that some people with schizophrenia features are joining a like-minded movement to **reject the medicalization of hearing voices**, as *STAT* reported on 13 July.

The movement started in the Netherlands but has spread to five continents. The United States hosts up to 90 related support groups, and a **World Hearing Voices Congress** will convene at Boston University in August.

Proponents argue that the voices they hear are not debilitating or harmful. Members of support groups discuss ways to manage the voices, including trying to set appointments with them and using headphones while talking to them to avoid stares from outsiders. Rather than signaling a need for medications, these people say, the voices signal the presence of stressors that need to be managed.

SOURCES:

STAT / 13 Jul 2017

Do patients who hear voices have the right to refuse psychiatric medicine? A growing movement says yes

<https://www.statnews.com/2017/07/13/hearing-voices-mental-illness/>

Carnitine conjecture

Could carnitine deficiency **underlie some cases of autism**? **Arthur L. Beaudet** of Baylor College of Medicine in Houston, Texas, argues that the answer is yes. In a 13 July commentary in *BioEssays*, he **unfolds the hypothesis** that various genetic variants interact with a carnitine deficiency to give rise to autism, especially in boys.

SOURCES:

BioEssays / 13 Jul 2017

Brain carnitine deficiency causes nonsyndromic autism with an extreme male bias: A hypothesis
<http://onlinelibrary.wiley.com/doi/10.1002/bies.201700012/full>

Molecular movie

Imagine being able to watch a movie of molecular changes in neurons during development as a way to see differences between brains with autism and those without. The possibility is on the horizon: Researchers may be able to engineer neurons that can record their own gene expression over time. Harvard University scientists have revealed the first replay of such a recording: a **movie of a galloping horse**, encoded in the DNA of living bacteria. They created the film using CRISPR technology.

SOURCES:

National Institutes of Health / 12 Jul 2017

Scientists replay movie encoded in DNA

<https://www.nih.gov/news-events/news-releases/scientists-replay-movie-encoded-dna>

Weighty trend

Members of the autism community have long known about the benefits of weighted blankets and other gadgets that apply generalized pressure. These devices seem to reduce sensitivity to light, sound and other sensory stimuli. Perhaps the most famous example is **Temple Grandin**'s **'squeeze machine.'**

'Pressure systems' on the market for people on the spectrum include a **deep-pressure vest** and **weighted backpacks.**

Now the rest of the world may be catching on: Devices offering high-pressure inputs could be **the next big health sensation**, *Quartz* reported on Tuesday. They may serve as sleep aids, mood

enhancers and fixes for other psychological issues.

No one knows why the devices work. According to *Quartz*, researchers have proposed explanations ranging from a diminished fight-or-flight response to elevated levels of mood-modulating molecules, such as serotonin.

SOURCES:

Quartz / 18 Jul 2017

The next big wellness trend capitalizes on your love of high-pressure showers and hugs
<https://qz.com/1030782/weighted-blankets-suggest-that-pressure-is-the-next-big-trend-in-health-and-wellness/>

Tuberous sclerosis tool

Many people with **tuberous sclerosis complex**, a condition in which benign tumors occur throughout the body, also have autism. A research tool used to detect autism features in infants with siblings on the spectrum may **also detect autism in infants with tuberous sclerosis**. The findings were published 26 June in *Pediatric Neurology*.

The Autism Observation Scale for Infants can identify autism in infants with tuberous sclerosis “earlier than ever before,” the researchers say. Of the 1-year-old children who scored 13 or higher on the scale, 89 percent were **identified a year later** as having autism, based on the Autism Diagnostic Observation Schedule.

SOURCES:

Pediatric Neurology / 27 Jun 2017

Utility of the autism observation scale for infants in early identification of autism in tuberous sclerosis complex
<http://www.sciencedirect.com/science/article/pii/S0887899417304745>

Adult autism

Three women on the spectrum have opened up to *Women’s Health* **about their experiences with**

autism. In interviews published 17 July, the women talk about where they struggle most, from sensory issues to communication. They discuss how they've worked to adapt to the world around them and what they'd like that world to understand about adults with autism.

One of the women, **Dena Gassner**, says that she has not “overcome” autism but embraced it “as an inherent facet of my existence.”

“I wish more people understood that there’s no such thing as ‘high-functioning.’ The closer we are to appearing non-disabled, the higher the expectations are for us, and that pressure to perform is more disabling than autism itself,” Gassner told the magazine.

SOURCES:

Women’s Health / 17 Jul 2017

'I'm an autistic adult—here's what I want you to know'

<http://www.womenshealthmag.com/health/women-with-autism>

Healthcare aftermath

Amidst crumbling federal **healthcare legislation efforts**, the American Academy of Pediatrics has issued a policy statement **addressing the financing of pediatric healthcare**, an issue near and dear to autism families. Writing 17 July in *Pediatrics*, members of the academy’s Committee on Child Health Financing call for increased Medicaid funding and other safeguards.

SOURCES:

Pediatrics / 17 Jul 2017

Principles of child health care financing

<http://pediatrics.aappublications.org/content/early/2017/07/14/peds.2017-2098> **Associated Press** / 18 Jul 2017

What’s next? Senate GOP scrambles after health care flop

<https://apnews.com/5fd69af9c1124637bb5c62ce95f2a335/What's-next?-Senate-GOP-scrambles-after-health-care-flop>

“Flawed” bill

When the U.S. Senate released yet another version of its proposed healthcare bill in early July, it seemed to make no one happy. *Medscape* reported 13 July on **pushback from the American College of Physicians and the American Psychiatric Association** (APA). **Saul Levin**, chief

executive officer of the APA, called the proposal “insufficient” and “deeply flawed.”

SOURCES:

Medscape / 13 Jul 2017

Senate releases revised healthcare bill

<http://www.medscape.com/viewarticle/882904>

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