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Our Flawed Mental Health Policies and Their Possible Link to the Disastrous State of Mental Health in America

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Abstract
Mental Health policy in America should address the growing need to help people live the happiest and best life possible, and support them in getting there. Recovery from mental health issues is founded on the principle that people can take on meaningful roles in the community and heal from mental health challenges when they receive the support they need. Are they receiving the help they need? Unfortunately, policymakers and mental health providers are so convinced that these individuals have an organic or genetic mental illness that they have called off the search for a better understanding of these conditions. When they start recognizing the epidemic of suicide and violent behavior, they call for more psychiatric labels and more psychiatrists to prescribe medication. However, few acknowledge that medication does nothing to address the conditions that derail the brain in the first place. Conventional medicine can be incredibly helpful when someone needs surgery, but when it comes to more nuanced disorders such as these, our Western doctors are trained to virtually ignore science that points to nutritional solutions, [1] [2] [3] [4] therapies, and holistic approaches—even when the latter are not only cheaper and more effective but sometimes the only good option. [5] Instead, they turn to psychiatric medication. Drugs often only mask symptoms without considering dangerous side-effects. Antidepressants, anti-anxiety medication, and stimulants are driving people to mania, paranoid delusions, suicidal ideation, death, and psychosis.[6] One study appearing in *JAMA Psychiatry* found that an estimated ninety-thousand patients per year visit emergency departments because of adverse psychiatric drug events."[7] Our pharmaceutical companies, news outlets and regulatory agencies are steering us away from the truth. It is time we separate biological facts from corporate fiction, and start changing the medical paradigm when treating these conditions.

Keywords
Mental health, functional medicine, failing health policy, medication, conflict of interest

Contents

1. Mental Health as a Genetic Condition

It is taught that our family history is one of our best indicators of potential risk for developing mental disorders and many other common diseases. We have been trained to believe that mental illnesses tend to run in families, that segments of our DNA are passed down from parents to children at conception and that having a close relative with a mental disorder could mean we are at a higher risk. This model bodes well with the pharmaceutical company's appetite to develop drug treatments. According to a bulletin published by (WHO) World Health Organization, genetics impacts the development of treatment greatly. "The concept of a drug target, against which compounds can be tested for inhibitory or facilitative activity, is central to modern processes of drug development." [8]

2. Genetics is Not the End of Our Story

Studies have attempted to discover genetic etiology; however, for a genetic influence alone to create a mental health epidemic would be against the fundamental laws of nature. A shared risk factor from the environment has tremendous biologic coherence. [9] The growing field of epidemiology and molecular biology, and the role of the environment in the etiology of mental illness has become more evident. [10] Research scientist James Lyons-Weiler agrees by explaining that, "Genes don't define us. The effect of the environment is apparent at the neuroanatomic level in the brain." [11] In truth, the environment in which we live and breathe, genetically modified foods and the chemicals we eat and inject have a direct influence on the expression of our genetic code, by altering the expression of genetic information. In the study of disease, researchers in the field of epigenetics are increasingly finding that the "turning "on or off" our genes are preventing us from detoxing these toxins effectively. These mutations inhibit the body's ability to digest food, transport substances between cells, and utilize essential nutrients appropriately.[5] Yet, we are not addressing environmental factors in the treatment of mental health disorders.

3. Root Causes are Ignored

3.1 Genetic Mutations

Altering our DNA creates genetic mutations and wreaks havoc on all of our metabolic processes. And, when the body cannot digest food, utilize nutrients and detoxify, it can directly affect mental health. Methylenetetrahydrofolate reductase (MTHFR) gene mutations affect 40 to 60 percent of the population and inhibit the body's ability to transform vitamin **B12** into vital folate enzymes. A normal **MTHFR** gene can convert vitamin B12 to folate (**B9**), an essential vitamin for brain, spine, and nerve health. Vitamin **B12** is vital to brain health – specifically detox. Deficiencies of essential **B** vitamins and mutations preventing the correct methylation can lead to developmental problems, mood dis-

turbances including increased anxiety and depression. Faulty expression of the **COMT** gene [12] can also cause a variety of problems, including irritability, hyperactivity, mood swings, OCD, sleep issues, and lower frustration and pain tolerance. The "Warrior Gene" **MAO-A** [13] (Monoamine oxidase A) is one of the two genes that encode mitochondrial enzymes. It is responsible for catalyzing the oxidizing amines, such as serotonin, norepinephrine, dopamine, and adrenalin. Mutation of this gene results in Brunner syndrome. **MAO** dysfunction (too much or too little **MAO** enzyme activity) is thought to be responsible for many psychiatric and neurological disorders including depression, mood swings, OCD, schizophrenia, substance abuse, migraines, irregular sexual maturation. It is also associated with behaviors associated with attention deficit disorder (ADD) [14] and autism.

3.2 The Standard American Diet (SAD)

Neurotoxic chemicals and foods are void of essential nutrients can lead to obsessive thoughts, depression, and violent behavior. There are extreme amounts of refined sugar/salt and thousands of chemicals allowed in the American food and drink supply. Many of them are harmless, but others such as artificial colors, flavors, preservatives, emulsifiers, high fructose corn syrup, sugar, and hydrogenated vegetable oil. [15] Glyphosate found in our food supply is not compatible with human biochemistry, it causes cancer [16] [17] and is neurotoxic. [18] A CSPI report, *Food Dyes: A Rainbow of Risks*, [19] further concludes that the nine artificial dyes approved in the United States are carcinogenic, cause hypersensitivity reactions and behavioral problems.

3.3 Nutritional Deficiencies at the Root

Our food supply is highly processed and refined. These foods do not contain adequate healthy protein, and many vital nutrients get stripped away. Many vitamins and minerals that are essential to our brain health are replaced with synthetic substitutes. In a 2014 article in the *American Journal of Public Health*, researchers evaluated the relationship between diet and mental health in children and adolescents. They reported that "there are numerous potential biological pathways by which diet quality may have an impact on mental health in children and adolescents." [20] A poor-quality diet that is lacking nutrient-dense foods may lead to nutrient deficiencies, which has been associated with mental health issues. For example, the dietary intake of folate, zinc, and magnesium is inversely associated with depressive disorders,[21] whereas dietary long-chain **omega-3** fatty acids are inversely related to anxiety disorders. [22] The gut microbiome has become a topic of significant interest as of late, with a new focus specifically on psychiatric disorders. The human body hosts an enormous abundance and diversity of microbes, which perform a range of essential and beneficial immune and metabolic functions. In a June 2016 volume of the *Journal of Molecular Psychiatry*, the authors examined how microbes in the gut affect brain function, and how imbalances of gut bacteria can lead to mental illness. "Evidence is now emerging that, through interactions with the gut-brain axis, the bidirectional communication system between the central nervous system and the gastrointestinal tract, the gut microbiome can also influence neural development, cognition, mood, and behavior." [23] Functional medicine M.D.s recognize how poor diet, pesticides, antibiotics, steroid use and other factors are influencing brain function by destroying healthy gut bacteria and negatively shaping the gut microbiome. [24]

3.4 Food Sensitivities

Often not recognized in the mainstream mental health model, food allergies and sensitivities can profoundly impact mental health. Dr. Melvyn R. Werback, M.D. explores nutritional influences on aggressive behavior in the *Journal of Orthomolecular Medicine*. The antibodies produced when a person consumes food that they have an intolerance to can cause intestinal permeability and trigger inflammation in the brain. This can lead many mental health symptoms, including increased anxiety/OCD, insomnia, brain fog, hyperactivity, impulsivity, irritability, and rage. [25] An immune reaction to everyday foods can provoke aggressive behavior. Reactions range from irritability to aggression to

psychosis. Some of the more common food intolerances are gluten, dairy, corn, soy, and nuts.

3.5 PANDAS (or PANS)

As described in the book *Brain Under Attack*, PANDAS (Pediatric Autoimmune Neuropsychiatric Disorders) is associated with an unresolved strep infection. It wreaks havoc on the immune and neurological system, causing brain encephalitis/inflammation. [26] Symptoms associated with this autoimmune disorder are facial tics, OCD symptoms, anorexia, depression, paranoia, irritability, hyperactivity, sleep disturbances, and psychosis. Pediatric Autoimmune Neuropsychiatric Disorders (PANS) can be triggered by other infections, as well as mold and toxins. Published reports indicate that Epstein Barr, herpes, varicella zoster, mycoplasma pneumonia, Lyme and other tick born infections are often triggers. [27] [28] [29] Many physicians who treat a large number of Lyme patients acknowledge that Lyme Disease can cause "Lyme Rage," which includes psychosis and violent behavior. More than one hundred peer-reviewed medical journal articles are linking tick-borne diseases to mental symptoms and quite a few that reference Lyme-induced rages. [30] As Dr. Kenneth Bock, M.D. points out in his book, *Healing New Childhood Epidemics*, PANDAS/PANS seriously impacts the brains of children with the diagnosis. The infection attacks the brain's basal ganglia, causing severe thought malfunctions and maladaptive behavior. The affected person could fly into uncontrollable rages and violent behavior. [31]

3.6 Heavy Metal Toxicity

Heavy metals can cause illness, aging, genetic defects, and mental health challenges and should be more widely acknowledged. Heavy metals such as mercury, fluoride, cadmium, aluminum, and lead can cause brain damage and inflammation. They can promote depression, anxiety, aggressive, antisocial, and violent behaviors. [32] [33] Today, humanity is exposed to the highest levels of toxic heavy metals in recorded history, and unique biochemical, genetic, and nutritional factors can make certain people more susceptible to the effects of them. [34] The problems with toxic metals are rarely emphasized in medical schools, and for that reason, they are often not treated by mainstream doctors. Heavy metal toxicity can come from a variety of sources, including but limited to pesticides, vaccinations, cookware, foil, medication, baking powder, refined and processed food, table salt, ground water, and beauty products. It is essential that more doctors join the field of functional and orthomolecular medicine to adequately address this condition.

3.7 Emotional Wounds and Trauma

Stressful situations and traumatic event(s) that can be caused by a barrage of mental health conditions such as anxiety and depression. The more sensitive and less resilient a person is the more vulnerable a person is to developing it. Types of upsetting scenarios including but not limited to a death of a loved one, divorce, an accident, a move, school pressure and bullying, as well as an abusive home environment. More emphasis needs to be placed on providing services and therapies they need. These services should include psychotherapy and Eastern Medicine bodywork practices such as, acupuncture, massage, and chiropractic care, which are known interventions to help people struggling with mental health. [35] [36] Unfortunately, the pharmaceutical companies have captured public health policy, and physicians often do not recommend these necessary treatments. When they are recommended, treatments such as acupuncture are not always covered by insurance.

3.8 Sleep Deprivation

Sleep problems and mental health are closely connected, yet not enough emphasis is placed on it. Harvard Medical School published an article in 2009, that linked sleep deprivation with mental health impairments. "Neuroimaging and neurochemistry studies suggest that a good night's sleep helps foster both mental and emotional resilience, while chronic sleep deprivation sets the stage for negative thinking and emotional vulnerability." [37] In a 2011 pediatric OCD study published in the *Journal of Anxiety Disorders*, researchers found a strong correlation between insufficient sleep and severe compul-

sive behavior. [38] Individuals are often prescribed a potentially dangerous sleep medication by their physician, without searching deeper to understand the root causes of the problem. Patients are not provided the metabolic workup that is required, nor offered natural treatments or remedies. Suggesting that nutritional deficiencies are linked to sleep disturbances is considered "radical" by conventional medical standards. Perhaps this is because there is no money in plant medicine and nutrition.

3.9 Medications

The very medicines aimed at reducing mental health symptoms can have the potential to create more. They have known for at least 35 years that psychotropic medications have the potential to induce depression, bipolar, anxiety, OCD, psychosis-like, or manic-like symptoms. One small example: psychotic symptoms from Ritalin can include hearing voices; visual hallucinations, urges to harm oneself, urges to harm someone else, suicide, severe anxiety, euphoria, grandiosity, paranoid delusions, confusion, increased aggression, and irritability. [39] Besides psychiatric medication there are other classes of drugs that have also been known to cause psychiatric symptoms including steroids and antihistamines [40].

4. Pharmaceutical Companies Have Hijacked Healthcare

Our doctors treated "deranged minds" and "bound bowels" with nutrition, gut rehabilitation, and detoxification long before mainstream medicine came around in the early 1900s. Examination of medical textbooks published before the 1920's prove this point. The power of plants and the purpose of healing dates back to biblical times. In truth, our ancestors searched for underlying causation and implemented diet, and natural practices a long time before pharmaceuticals were introduced to the public in the late 1900s. Slowly, these early holistic practices were abandoned to make way for new advancements in medicine. Newer often forgets the older and wiser, leaving behind the tried and true. Modern interventions and modern medicines can save lives. Yet, we must realize that many only offer a quick suppression of symptoms by using artificial chemicals and do not fix anything. They carry the potential to cause many adverse effects. It seems fundamentally irrational. We should look to discern disease origins with laboratory technology coupled with good old fashion doctoring. *The Household Physician —A 20th Century Medica* is a twelve-volume text dating back to 1918 includes "the latest discoveries in medicine and the most approved methods of treatment." There is a section on "Diseases of the Brain" that targets explicitly stress, convulsions, and illness of the mother during gestation, excessive use of mercury, and issues of the bowels and digestive tract. The text then discusses treatments such as sea baths and the importance of minerals, necessary treatment of constipation "when the bowels are bound," the use of "magnesia" (magnesium), and tonics for debility (herbal treatments such as chamomile and cinnamon).

5. Resistance to Looking Deeper

Unfortunately, many people are unaware that there are healthier and more natural solutions available. Some of these people are resistant to change and look for a quick fix. A doctor may recommend exercise and dietary changes for weight loss or improved health. We resist, often looking for the easier and/or cheaper way out. Another issue is that disease equals big money. Pharmaceutical companies have set out to discredit alternative medicine — especially in those areas of most significant drug profits, such as cancer, heart disease, psychiatric disorders, and allergies. These companies aren't only in the business of saving lives. They're also in the business of inflating the profit margins on their drugs as much as possible. According to research firms, these drug companies use the term "scientific evidence" as a political definition to control the FDA and National Institutes of Health. They buy investigative journalists with their advertising. According to Robert, F. Kennedy, Jr.:

> Seventy percent of the news advertising revenue come from pharmaceutical ads. And if you watch television

> any night and watch the network news, you'll see they become just a vehicle for selling pharmaceuticals. [41]

They pay doctors and psychiatrists to speak on their behalf (as so-called "Key Opinion Leaders") and offer up expensive trips and steep payments. They block financial contributions by using terms like "unproven treatments," and many "charitable organizations" are pharma front false not-for-profits. Congress seems entirely controlled as well. These are only some of the practices of pharmaceutical companies that spend millions of dollars to implement carefully designed plans. R. Webster Kehr of the Independent Cancer Research Foundation says, "The FDA, NIH, NCI, ACS and medical schools are their puppets." [42] When "alternative" therapy treatments or modalities are recommended, the conventional medical system will often discredit and discourage it. Wikipedia even mentions how the medical community refers to alternative medicine as "folk knowledge" and homeopathy as "quackery." It seems clear that there are some self-serving reasons for those labels. For example, pharmaceutical companies are even going as far as packaging products that come naturally like fish oil and acidophilus and charging our insurance companies exorbitant amounts of money for what we can buy over-the-counter for one-tenth the price. [5]

6. Summary

Could we be doing a better job to address mental health in America? Can future suicides and homicides be prevented? I believe so, and it starts by digging deeper to help uncover the many potential root causes of mental health disorders. We need to start acknowledging that those who have mental health symptoms; people committing suicide or murder are medically ill; not mentally ill. And these causes of psychiatric symptoms need more attention. We need more doctors to be trained in functional medicine to get to the root of the mental disease. We need our insurance companies to pay for testing and treatments and naturopathic physicians and other doctors and practitioners that understand and treat using a 'systems biology' approach to manage the health of their patients. We need more due diligence in our healthcare system. And we need to stop the pharmaceuticals from leading us away from the truth. Just handing out medications to address symptoms and hoping the client follows through with recommended weekly individual psychotherapy appointments, is not enough. Studies reveal psychiatric medications increase the risk of suicide, violence and homicide at all ages. It seems that the" unanticipated side effects of these medications can be the final trigger in a homicidal or suicidal event.[43] [44] [45] [46]

References

[1] C. Bernard Gesch, Sean M. Hammond, and Sarah E. Hampson and. **Influence of supplementary vitamins, minerals and essential fatty acids on the antisocial behavior of young adult prisoners—Randomized, placebo-controlled trial** . *The British Journal of Psychiatry*, 101:22–28, 2002. PubMed .

[2] University of Southern California. **Nutrition Key to Aggressive Behavior** . *USC News Press Release*, Nov 2004. USC .

[3] Selhub Eva. **Nutritional Psychiatry: Your Brain on Food** . *Harvard Medical School*, Apr 2018. PubMed .

[4] Karen C Lindell, Martin Kohlmeier, and Steven H Zeisel. **, Status of nutrition education in medical schools** . *Journal of Clinical Nutrition*, 83:941S–944S, 2006.

[5] Giustra-Kozek Jennifer. **Healing Without Hurting: Treating ADHD, Apraxia and Autism Spectrum Disorders Naturally and Effectively Without Harmful Medications** . *Changing Lives Press: FAL Enterprises, New York*, 2018. Amazon .

[6] Grace Jackson. **Rethinking Psychiatric Drugs** . *" Antidepressants Research.* here .

[7] et.al. Hampson, Lee. **Emergency Department Visits by Adults for Psychiatric Medication Adverse Events** . *JAMA Psychiatry*, 71(9):1006–1014, Sept 2014. PubMed .

[8] Steven E Hyman. **The genetics of mental illness: implications for practice** . *Bulletin of the World Health Organization*, 2000. PDF .

[9] Mark Sisson. **Environmental Toxins and Gene Expression** . 2009. Here .

[10] Charles Schmidt. **Environmental Connections: A Deeper Look into Mental Health** . *Environ Health Perspectives*, 115(8):A404–A410, Aug 2007. Here .

[11] James Lyons-Weiler. **Environmental and Genetic Causes of Autism** . *Skyhorse Publishing, New York*, 2016. Amazon .

[12] Sampaio AS, Hounie AG, Petribú K, Cappi C, and et.al. **COMT and MAO-A polymorphisms and obsessive-compulsive disorder** . *PLoS Oneu*, 10(3), Mar 2015. PubMed .

[13] McDermott R, Tingley D, Cowden J, Frazzetto G, and Johnson DD. **Monoamine oxidase A gene (MAOA) predicts behavioral aggression following provocation** . *Proc Natl Acad Sci U S A*, 106(7):2118–23, Feb 2009. PNAS .

[14] Malmberg K, Wargelius HL, Lichtenstein P, Oreland L, and Larsson JO. **ADHD and Disruptive Behavior scores - associations with MAO-A and 5-HTT genes and with platelet MAO-B activity in adolescents** . *BMC Psychiatry*, 8(18), Apr 2008. BMC .

[15] Lau K, McLean WG, Williams DP, and Howard CV. **Synergistic interactions between commonly used food additives in a developmental neurotoxicity test** . *Toxicol Sci*, 90:178–87, 2006. PubMed .

[16] IARC. **In 2015, the World Health Organization's International Agency for Research on Cancer classified glyphosate as "probably carcinogenic to humans** . 2015. PDF .

[17] et. al. Zhang, Luoping. **Exposure to Glyphosate-Based Herbicides and Risk for Non-Hodgkin Lymphoma: A Meta-Analysis and Supporting Evidence** . *Science Direct*, Feb 2017. ScienceDirect .

[18] Cattani D, de Liz Oliveira Cavalli VL, Heinz Rieg CE, Domingues JT, Dal-Cim T, Tasca CI, Mena Barreto Silva FR, and Zamoner A. **Mechanisms underlying the neurotoxicity induced by** . *Toxicology*, 320:34–45, June 2014. PubMed .

[19] Center for Science in Public Interest. **Food Dyes: A Rainbow of Risks** . June 2010. CSP .

[20] Adrienne O'Neil, Shae E. Quirk, Siobhan Housden, Sharon L, Lana J Brennan, Williams, Julie A. Pasco, Michael Berk, Felice N. Jacka, and et al. **Relationship Between Diet and Mental Health in Children and Adolescents: A Systematic Review** . *Am J Public Health*, 104(10):e31–e42, Oct 2014. PubMed .

[21] Jacka FN, Maes M, Pasco JA, Williams LJ, and Berk M. **Nutrient intakes and the common mental disorders in women** . *J Affect Disord*, 141(1):79–85, Dec 2012. PubMed .

[22] Jacka FN, Pasco JA, Williams LJ, Meyer BJ, Digger R, and Berk M. **Dietary intake of fish and PUFA, and clinical depressive and anxiety disorders** . *Br J Nutrition*, 109(11):2059–66, Jun 2013. PubMed .

[23] Rogers, Keating, Young, and et al. **From gut dysbiosis to altered brain function and mental illness: mechanisms and pathways** . *Molecular Psychiatry*, 21(6):738–748, June 2016. PubMed .

[24] Ian Myles. **Fast food fever: reviewing the impacts of the Western diet on immunity** . *Nutrition Journal*, 31(61), 2014.

[25] Melvyn R. Werbach. **Nutritional Influences on Aggressive Behavior** . *Journal of Orthomolecular*, 7, 1995. Orthomolecular .

[26] Epidemic Answers. **Epidemic Answers, Brain Under Attack: A Resource for Parents and Caregivers of Children with PANS, PANDAS, and Autoimmune Encephalitis, New York** . 2018.

[27] Muller N, Riedel M, Blendinger C, and et.al. **Mycoplasma pneumoniae infec-**

tion and Tourette's syndrome . *Psychiatry Research*, 129(2):119–125, Dec 2004. PubMed .

[28] Dale RC, Church AJ, and Heyman I. **Striatal encephalitis after varicella zoster infection complicated by Tourettism. Movement disorders official journal of the Movement Disorder Society** . 18(12):1554–1556, Dec 2003. PubMed .

[29] Fallon BA, Niel's JA, Parsons B, Liebowitz MR, and Klein DF. **Psychiatric manifestations of Lyme borreliosis** . *The Journal of Clinical Psychiatry*, 54(7):263–268, Jul 1993. PubMed .

[30] **References for Psychiatry and Lyme/Tick-Borne Diseases** . WebLink .

[31] Kenneth Bock. **Healing the New Childhood Epidemics: Autism, ADHD, Asthma, and Allergies: The Groundbreaking Program for the 4-A Disorders** . *New York: Ballantine Books*, 2008.

[32] Orish Ebere Orisakwe. **Role of Cadmium and Lead in Psychiatry** . *N Am J Med Science*, 6(8):370–376, Aug 2014. PubMed .

[33] India Department of Biotechnology. **Toxicity, Mechanism and Health Effects of Some Heavy Metal** . *Interdiscip Toxicol*, 7(2):60–72, June 2014. PubMed .

[34] Lyons-Weiler J. **Autism is an Acquired Cellular Detoxification Deficiency Syndrome with Heterogeneous Genetic Predisposition** . *Autism Open Acces*, 8(1):1–15, 2018. PDF .

[35] Aung SK, Fay H, and Hobbs RF. **Traditional Chinese Medicine as a Basis for Treating Psychiatric Disorders: A Review of Theory** . *Med Acupunct*, 25(6):398–406, Dec 2013. PubMed .

[36] Plaza-Manzano G, Molina-Ortega F, and et.al. **Changes in biochemical markers of pain perception and stress response after spinal manipulation** . *J Orthop Sports Phys Therapy*, 44(4):231–9, Apr 2014. PubMed .

[37] Harvard Medical School. **Sleep and Mental Health** . *Harvard Health Publishing*, 2019. Harvard .

[38] Candice Alfano. **OCD** . *J Anxiety Disorders*, 25(6):835–839, Aug 2011. ScienceDirect .

[39] National Institute of Health. **Drug Fact Sheets: Methylphenidate**. *U.S. National Library of Medicine*. NLM .

[40] . *The Medical Letter*. MedLetter .

[41] John Vibes. **, Robert Kennedy, Jr Says 70from Big Pharma** . *True Activist*, June 2015. TrueActivist .

[42] R. Webster Kehr. **The War Between Orthodox Medicine and Alternative Medicine (eBook 2003)** . Here .

[43] Gotzsche Peter C. **Antidepressants and Murder: Case Not Closed** . *British Medical Journal*, pages 358–j3697, Aug 2017. BMJ .

[44] Hammad TA, Laughren T, and Racoosin J. **Suicidality in pediatric patients treated with antidepressant drugs** . 63:332–339, 2006. PubMed .

[45] Gibbons RD, Brown CH, Hur K, and et al. **Suicidal thoughts and behavior with antidepressant treatment: reanalysis of the randomized placebo-controlled studies of fluoxetine and venlafaxine [published correction appears in Arch Gen Psychiatry** . *Arch Gen Psychiatry*, 69:580–587, 2012. PubMed .

[46] FDA. **DYANAVEL XR, Safety Labeling Changes Approved By FDA Center for Drug Evaluation and Research (CDER)** . *Food and Drug Administration*, May 2017. FDA .