

Chair Lipps, Vice-Chair Holmes, Ranking Member Russo, and respected members of the Committee,

Two decades ago an autism diagnosis was somewhat uncommon. It was also considered to be a disorder that only, or mainly affected children. Autism is now the fastest-growing developmental disorder, and yet somehow still drastically overlooked.

Now affecting 1 in 59, no medications cure or treat the core symptoms of ASD. (CDC 2018) Core symptoms include, but are limited to abnormal development of cognitive skills; unusual response to sensory stimuli; & behavioral difficulties, hyperactivity, short attention span, impulsivity, aggressiveness, and self-injurious actions.

Autism is a severe, long-term developmental disability that affects cognitive ability, and physical functioning. Including the ability to reason, problem-solve, plan, exercise judgment, and learn.

A 2008 Danish Study found that the mortality risk among those with autism was nearly twice that of the general population. Those statistics are very alarming for us parents. The average life expectancy for the general population is roughly 72 years old, whereas people with autism that also have cognitive disabilities had an average life expectancy of just under 40 years old.

Despite being prescribed a variety of antipsychotics, antidepressants, and benzodiazepines still suicide is one of the leading causes of early death among our kids with autism.

Previous studies had shown that roughly 30 percent to 50 percent of people with autism spectrum disorders have considered suicide. Also reflecting that the high functioning community is nine times more likely to commit suicide.

Kids diagnosed 14 years of age and younger are roughly 40 times more likely to die from injury.

Epilepsy is also common among people with autism and the likelihood of developing it increases with age, an estimated 30 percent of those diagnosed develop seizures. *Note that the MANY side effects of the FDA-approved medications include seizures, heart failure, sudden death, and suicidal thoughts.* Roughly 20 - 40 percent of people with autism spectrum disorder also have epilepsy compared with 1 percent of the general population.

People on the spectrum and those who have cognitive disabilities are roughly 40 times more likely than the general population to die prematurely from a neurological condition.

Those with autism are subject to experience a variety of medical problems, such as gastrointestinal disorders. However, one of the most common is heart disease.

There's no scientific evidence to explain exactly why this condition is common with autism, but stress may have a lot to do with it. Bullying may lead to feelings of isolation. Other people with autism spectrum disorders experience sensory overload and sensitivity to noise and bright lights.

Furthermore, roughly 40 percent of children with ASD do not speak and 25-30 percent have some speech, according to the NAA (National Autism Association). This leads to a lifetime of struggling to not just the person diagnosed, but the entire family.

The high functioning community with Aspergers and Pervasive Developmental disorder factor into this as well. Those with Autism often suffer from lifelong stress and anxiety. This stress can also lead to physical ailments, including heart disease, brain inflammation, strokes, and diabetes.

***The three main killers of our kids include seizures, suicide, and heart-related issues. ALL three are side effects listed on the FDA-approved medications including, suicidal thoughts, seizures, and heart complications such as arrhythmias, heart failure, and sudden death are ALL side effects listed.***

Autism can be viewed as an extremely complex set of medical conditions that are unique to each individual diagnosed, hence why it is a SPECTRUM condition. Underlying medical and comorbid conditions need to be addressed and not attributed to one's autism.

Therefore, some emphasis **needs** to be shifted into establishing more time and energy toward helping people already diagnosed.

## **Mortality and ASD Studies:**

*Excess Mortality and Causes of Death in Autism Spectrum Disorders: A Follow up of the 1980s Utah/UCLA Autism Epidemiologic Study*

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4814267/>

*Injury Mortality in Individuals With Autism*

<https://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2017.303696>

*Mortality in Autism: A Prospective Longitudinal Community-Based Study*

<https://link.springer.com/article/10.1007/s10803-009-0883-4>

*Premature mortality in autism spectrum disorder*

<https://www.cambridge.org/core/journals/the-british-journal-of-psychiatry/article/premature-mortality-in-autism-spectrum-disorder/4C9260DB64DFC29AF945D32D1C15E8F2>

## **Why is this important?**

Individuals diagnosed are 2.5 times MORE likely to die than neurotypical people.

Autism is very often a co-occurring chronic condition that often plays a role in the cause of death and premature mortality rates in those diagnosed. Autism causes a **HOST** of health ailments for those diagnosed. The general population clearly tends to have better overall health than people with autism.

No pharmaceutical can safely or effectively treat the core symptoms of ASD. Antipsychotics, risperidone (Risperidone) and aripiprazole (Abilify) are the only two medications that are FDA approved to treat irritability in ASD, often unsuccessfully.

Individuals with ASD often are prescribed a variety of antidepressants, anxiolytics, antipsychotics, benzodiazepines as well as stimulants in off-label, untested combinations to treat symptoms. These drugs have serious side effects and when given in combination, the risk of harm increases significantly.

We need to look at what we can do to improve the quality of life for people with autism in Ohio. The cost of not doing so ultimately comes at the expense of our children.

Autism now affects 1 in every 59 children in the United States and that percentage is growing rapidly. Therefore we are socially and morally obligated to focus on research and treatment shifted to treating the entire spectrum of challenges autism brings as well as the effects in adulthood.

## **This impacts society as well.**

Schools are seeing higher special education demographics and are underfunded and understaffed to handle this growing prevalence, more residential care facilities and private special education schools are needing to be built. Hospitals are needing to staff a wide array of therapists, and early intervention facilities are needing to be funded.

Not to mention the financial and other impacts on the families of those diagnosed, while also factoring in the cost of the litany of medications prescribed into this equation as well.

*Most of these families live on fixed incomes.*

<https://www.longdom.org/open-access/impact-of-autism-spectrum-disorder-on-family-44919.html#:~:text=Another%20review%20of%20studies%20found,high%20income%20countries%20%5B42%5D.>

<https://pubmed.ncbi.nlm.nih.gov/22869324/>

Families are having to choose to place their children in the care of the already overwhelmed state programs. Which Gov DeWine has previously addressed, is already a growing issue in our state.

<https://www.usnews.com/news/best-states/ohio/articles/2020-02-04/ohio-governor-has-plan-to-address-relatives-caring-for-kids>

Families are being forced into becoming medical refugees, fleeing to legal states that allow passionate, safe medical access for ASD.

We must urge those in the medical community, as well as the general population, to change how they observe and treat autism. This is a very definite statement of how we treat autistic people and their families.

### **How can cannabis treat a complex condition like Autism?**

*Autism spectrum disorders (ASDs) are a set of complex neurodevelopmental disorders defined behaviorally by impaired social interaction, delayed and disordered language, repetitive or stereotypic behavior, and a restricted range of interests.*

The key is in the Endocannabinoid System or ECS.

The Endocannabinoid System represents a network of lipid signaling pathways. Regulating many, or all, that are dysregulated in ASD, positive for helping core symptoms. Improvements are a result of the medicinal effects of cannabis on the underlying medical conditions of autism.

Recent research from Stanford University shows that there is a documented deficiency of lower plasma levels of anandamide in individuals with ASD. Anandamide is the endocannabinoid that mimics tetrahydrocannabinol (THC) in the brain. This specific endocannabinoid plays a crucial role in memory, learning, social functioning, easing anxiety, and much more.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5848550/>

**“Background: Autism spectrum disorder (ASD) is a neurodevelopmental disorder characterized by restricted, stereotyped behaviors and impairments in social communication. Although the underlying biological mechanisms of ASD remain poorly understood, recent preclinical research has implicated the endogenous cannabinoid (or endocannabinoid), anandamide, as a significant neuromodulator in rodent models of ASD. Despite this promising preclinical evidence, no clinical studies to date have tested whether endocannabinoids are dysregulated in individuals with ASD. Here, we addressed this critical gap in knowledge by optimizing liquid chromatography-tandem mass spectrometry methodology to quantitatively analyze anandamide concentrations in banked blood samples collected from a cohort of children with and without ASD (N = 112).**

**Findings: Anandamide concentrations significantly differentiated ASD cases (N = 59) from controls (N = 53), such that children with lower anandamide concentrations were more likely to have ASD (p = 0.041). In keeping with this notion, anandamide concentrations were also significantly lower in ASD compared to control children (p = 0.034).**

**Conclusions: These findings are the first empirical human data to translate preclinical rodent findings to confirm a link between plasma anandamide concentrations in children with ASD. Although preliminary, these data suggest that impaired anandamide signaling may be involved in the pathophysiology of ASD.”**

Moreover, the argument builds as various clinical trials prove the efficiency of cannabis medication in the treatment of Autism.

**“Real-life experience of medical cannabis treatment in autism: Analysis of safety and efficacy:**

**Lihl Bar-Lev Schleider, Raphael Mechoulam, Naama Saban, Gal Meiri, Victor Novack  
Scientific Reports 9 (1), 200, 2019**

**There has been a dramatic increase in the number of children diagnosed with autism spectrum disorders (ASD) worldwide. Recently anecdotal evidence of possible therapeutic effects of cannabis products has emerged. The aim of this study is to characterize the epidemiology of ASD patients receiving medical cannabis treatment and to describe its safety and efficacy. We analyzed the data prospectively collected as part of the treatment program of 188 ASD patients treated with medical cannabis between 2015 and 2017. The**

**treatment in the majority of the patients was based on cannabis oil containing 30% CBD and 1.5% THC. Symptoms inventory, patient global assessment, and side effects at 6 months were primary outcomes of interest and were assessed by structured questionnaires. After six months of treatment, 82.4% of patients (155) were in active treatment and 60.0%(93) have been assessed; 28 patients (30.1%) reported a significant improvement, 50 (53.7%) moderate, 6 (6.4%) slight and 8 (8.6%) had no change in their condition. Twenty-three patients (25.2%) experienced at least one side effect; the most common was restlessness (6.6%). Cannabis in ASD patients appears to be well tolerated, safe and effective option to relieve symptoms associated with ASD.**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6336869/>

## Preliminary studies

Thus far, only five research studies to the best of our knowledge exist which have examined the direct effects of medical cannabis in individuals with ASD. The most recently published study conducted in Israel examined the safety and efficacy of medical cannabis use amongst 188 patients with ASD. Most patients were treated using cannabis oil (1.5% THC and 30% CBD), and functional activities of daily living, mood, and quality of life were assessed using structured. Only 93 parents of 155 active participants participated in the six-month follow-up, but a third of participants reported a significant improvement on the three endpoints. Side effects were experienced by approximately 25% of patients, with the most common side effects reported as restlessness followed by sleepiness and psychoactive effects.

<https://www.nature.com/articles/s41598-018-37570-y>

In another study also conducted in Israel, 53 children with ASD were administered oral cannabinoids under supervision. A 1:20 ratio of CBD and THC was used for a mean duration of 66 days, at a concentration of 30%, with a recommended daily dose of 16 mg/kg for CBD and 0.8 mg/kg of THC (maximal daily dose of 600 mg and 40 mg respectively). The study examined changes in the child's comorbid symptoms using prospective bi-weekly interviews with parents. Effects of cannabidiol in respect to hyperactivity, sleep problems, self-injury, and anxiety were reported as an improvement, no change, or worsening. Of interest, changes within the cohort for these symptoms were large-scale compared to peer-reviewed data for treatment using conventional methods.

**As such, hyperactivity was considered improved at 80%, self-injury at 82%, sleep problems at 60%, and improvement in anxiety symptoms at 64%. Of the children who displayed hyperactivity symptoms, over 68% reported improvement, over 28% had no change, while almost 3% reported worsening of hyperactivity. Improvements in self-injurious behavior were seen in almost 68% of children, 23.5% had no change while almost 9% reported worsening of self-injury. Over 71% reported improvements in sleep, 23.8% had no change, while 4.7% reported worsening effects. Anxiety was improved in over 47% of children, almost 30% had no change, while 23.5% had worse anxiety symptoms. Consequently, the study reported a 74.5% overall improvement in symptoms of ASD comorbidities, although mild adverse effects of somnolence and decreased appetite were reported in 12 and 6 children respectively. The authors reported no statistically significant difference in hyperactivity, sleep, or anxiety of cannabidiol oil compared to conventional treatments of these symptoms.**

<https://www.frontiersin.org/articles/10.3389/fphar.2018.01521/full>

A third study from Israel focused on children with ASD and severe behavioral concerns and assessed the tolerability and efficacy of cannabidiol-rich cannabis. Led by Dr. Aran at the Shaare-Zedek Medical Center in Jerusalem, as a retrospective feasibility study for their clinical trial grant mentioned earlier (NCT02956226), the study systematically assessed 60 children. Participants were prescribed CBD and THC in a 20:1 ratio, as a whole-plant extract dissolved in olive oil ("mean total daily dose was  $3.8 \pm 2.6$  mg/kg/day CBD and  $0.29 \pm 0.22$  mg/kg/day THC for children who received three daily doses ( $n = 44$ ) and  $1.8 \pm 1.6$  mg/kg/day CBD and  $0.22 \pm 0.14$  mg/kg/day THC for children who received two daily doses ( $n = 16$ )).

The study found 61% of the behavioral problems among participants were "much improved" or "very much improved" according to parent reports. Improvement was also found in anxiety levels in 39% of the children and a 47% improvement in communication. Disruptive behaviors assessed by the Home Situations Questionnaire-Autism Spectrum Disorder and the Autism Parenting Stress Index showed improvement by 29 and 33% respectively. An additional benefit following cannabis treatment was the reduced intake of medications; 24% of participants stopped taking medication, over 30% of children received fewer medications or a lower dose, and 8% received more additional or a higher dose of their current regimen.

<https://clinicaltrials.gov/ct2/show/NCT02956226>

A Chilean study published by Kuester examined the effects of cannabis extracts on symptoms of ASD among a small sample of 20 children and one adult with ASD. Participants were monitored after taking sublingual whole-plant cannabis extracts for at least 3 months. Almost 72% of the participants used a balanced THC to CBD extract, 19% used a high-CBD option, and almost 10% used high-THC extracts. Details on the administered dosage were not found in the published study or elsewhere; outcomes were assessed using the Clinical Global Impression of Improvement and Autism Parenting Stress Index.

Based on these assessments, 66.7% of the participants showed significant improvement in at least one core ASD symptom like repetitive behaviors, language, and social communication. Some improvement was reported by most participants including accepting food, sensory difficulties, seizures, and/or sleep disorders. Despite these reported benefits, three patients reported adverse symptoms: increased agitation ( $n = 2$ ) and irritability ( $n = 1$ ). These conditions were resolved with changes to the cannabis strain.

[https://www.jns-journal.com/article/S0022-510X\(17\)33120-9/fulltext](https://www.jns-journal.com/article/S0022-510X(17)33120-9/fulltext)

The earliest study identified was of a 6-year old male child with ASD conducted in Austria utilizing Dronabinol (THC). The child received THC dissolved in sesame oil with an initial dosage in the morning constituting one drop (0.62 mg) which gradually increased over the 6 months to the maximum tolerated dose of two drops in the morning, one drop midday, and three drops in the evening (total dose of 3.62 mg). Significant improvements were noted in hyperactivity, irritability, vocal stereotypy and inappropriate speech symptoms, and stereotypic behavior based on assessments using the Aberrant Behavior Checklist at baseline and after six months of treatment. Hyperactivity dropped by 27 points, lethargy decreased by 25 points, irritability by 12 points, stereotypic behavior by 7 points, and inappropriate speech improved by 6 points.

[http://www.cannabis-med.org/iacm/data/pdf/en\\_2010\\_04\\_1.pdf](http://www.cannabis-med.org/iacm/data/pdf/en_2010_04_1.pdf)

### **Evidence from comorbid conditions**

Although the aforementioned studies illustrate the potential of cannabis to treat core symptoms of ASD, these studies are constrained in their scope of evidence given their small sample sizes, lack of control groups, and other reported limitations. As such, results from the clinical trials pending publication of results and completion, and additional large scale clinical trials specific to this population will help build evidence for the safety and efficacy of medical cannabinoids for ASD patients. Until this time, evidence for cannabis use in this population can be merely inferred from studies conducted for pathological conditions shared by other patient populations.

<https://www.sciencedirect.com/science/article/abs/pii/S0278584618304445?via%3Dihub>

### **Epilepsy**

An estimated 25% of children with treatment-resistant epilepsy (who also display other conditions such as mild to severe intellectual disability, sleep disturbances, mood disorders, and psychosis) are comorbid with ASD. Research on the medicinal use of cannabis for treating individuals with seizures and epilepsy have been extensive and as such, seizure disorders are listed as a qualifying condition in states which permit medical cannabis. Gaston and Friedman discuss the therapeutic mechanism of CBD in treating epilepsy, reporting that rather than targeting CB1R and CB2R, CBD's anticonvulsant properties target "TRPV1, voltage-gated potassium, and sodium channels, and GPR55, among others".

[https://www.epilepsybehavior.com/article/S1525-5050\(16\)30579-0/fulltext](https://www.epilepsybehavior.com/article/S1525-5050(16)30579-0/fulltext)

<https://linkinghub.elsevier.com/retrieve/pii/S1525505016304772>

<https://www.thieme-connect.de/products/ejournals/abstract/10.1055/s-0037-1598109>

An Australian survey conducted by Suraev reported that "15% of adults with epilepsy and 13% of parents/guardians of children with epilepsy were currently using, or had previously used, cannabis products to treat epilepsy. Of those with a history of cannabis product use, 90% of adults and 71% of parents reported success in reducing seizure frequency after commencing cannabis products."

In an uncontrolled retrospective case study of 272 patients with epilepsy (such as Dravet Syndrome, Rett syndrome, and Lennox-Gastaut syndrome), participants consumed an effective total cannabinoids dose ranging from 0.05 to 9 mg/kg/day with effective serum levels of CBD ranging from 1.8 to 80 ng/ml. Of the participants, 28% of subjects

experienced a 76–99% reduction in seizures, 10% experienced a full clinical response, while 14% of participants found no effect of artisanal cannabis preparations in reducing seizures. Also, increased alertness was reported as a desired side effect, while mild and infrequent side effects included decreased appetite, fatigue, and somnolence.

Substantial interest and willingness to participate in cannabinoid research has offered a long-awaited potential pharmacotherapy solution to treatment-resistant epilepsy and/or limiting the side effects as compared to other treatments.

[https://www.epilepsybehavior.com/article/S1525-5050\(17\)30073-2/fulltext](https://www.epilepsybehavior.com/article/S1525-5050(17)30073-2/fulltext)

The literature on cannabinoids and epilepsy, specifically for the treatment of intractable seizures in Dravet and Lennox-Gastaut syndromes and co-occurring autism-like behaviors is, as a result, comprehensive and has led to the recent approval of Epidiolex, oral cannabidiol.

[https://www.ejinme.com/article/S0953-6205\(18\)30004-9/fulltext](https://www.ejinme.com/article/S0953-6205(18)30004-9/fulltext)

### **Sleep disorders**

Problems with sleep are a common comorbidity in children and adolescents with ASD, with a prevalence estimated between 40 to 80%. Sleep disorders have a significant impact on these individuals, and affect daily life activities, the ability to interact socially, and have also been associated with increased parental stress.

<https://www.pediatricneurosciences.com/article.asp?issn=1817-1745;year=2015;volume=10;issue=4;spage=304;epage=307;aulast=Devnani>

### **Behavioral deficits**

An additional core phenotype of ASD is an impaired social functioning ability, including aggression and self-injurious behavior (incidence ranging between 35 and 60%), which can impair academic achievement, education outcomes, rates of employment, and income. **Unfortunately, standard treatments do not benefit approximately 40% of children with ASD and disruptive behavior, leaving caregivers distressed and increasing social isolation.** In a review undertaken by the National Academies of Sciences, Engineering, and Medicine, evidence assessed from systematic reviews and clinical studies indicates limited evidence for the link between cannabis use and social functioning.

<https://www.sciencedirect.com/science/article/abs/pii/S0278584618304445?via%3Dihub>  
[https://books.google.com/books?hl=en&lr=&id=FTW9DgAAQBAJ&oi=fnd&pg=PR1&ots=-jaVaUcesX&sig=NK14tttP\\_jowM5W\\_d2byfrYk5h8#v=onepage&q&f=false](https://books.google.com/books?hl=en&lr=&id=FTW9DgAAQBAJ&oi=fnd&pg=PR1&ots=-jaVaUcesX&sig=NK14tttP_jowM5W_d2byfrYk5h8#v=onepage&q&f=false)

Anxiety and mood disorders are also commonly reported to affect those with ASD, and at least 40% are comorbid with anxiety which aggravates other symptoms. In a double-blind randomized study using healthy controls and patients with a social anxiety disorder (SAD) with no previous treatment experience, participants received a placebo or a single administration of CBD (600 mg) one and a half hours before a simulated public speaking test. Participants receiving a CBD dose were noted to have decreased “anxiety, cognitive impairment and discomfort in their speech performance as compared to the placebo group”.

<https://www.nature.com/articles/npp20116>

Attention-deficit/hyperactivity disorder (ADHD) is also a commonly co-occurring diagnosis in ASD patients with an incidence of 41 to 78%.

### **Other supporting studies:**

*Medical Cannabis in Autistic Children*

<https://howard-autism.org/wp-content/uploads/2020/05/Medical-Cannabis-in-Children.pdf>

*Endocannabinoids in nervous system health and disease: the big picture in a nutshell*

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3481537/>

*The Endocannabinoid System and Autism Spectrum Disorders*



<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5618565/>

*Endocannabinoid Signal Dysregulation in Autism Spectrum Disorders: A Correlation Link between Inflammatory State and Neuro-Immune Alterations*

<https://www.mdpi.com/1422-0067/18/7/1425>

*Endocannabinoid Signaling in the Control of Social Behavior*

<https://www.sciencedirect.com/science/article/abs/pii/S0166223617300772>

*Cannabidiol Based Medical Cannabis in Children with Autism- a Retrospective Feasibility Study*

[https://n.neurology.org/content/90/15\\_Supplement/P3.318.abstract](https://n.neurology.org/content/90/15_Supplement/P3.318.abstract)

There is strong and substantial scientific evidence that supports the use of medical cannabis as a safe, viable treatment for Autism Spectrum Disorder. Several Ohio physicians and scientists agree and have provided expert testimony on the matter.

<https://www.med.ohio.gov/Portals/0/For%20The%20Public/Combined%20Subject%20Matter%20Expert%20Reports.pdf>

## **Legal States**

Moreover, a bevy of states, including Colorado, Delaware, Georgia, Iowa, Illinois, Louisiana, Maine, Michigan, Minnesota, Mississippi, Missouri, North Dakota, Nevada, New Mexico, Pennsylvania, Rhode Island, Utah, Texas, and the territory of Puerto Rico all permit autism as a qualifying condition for MMJ programs, pediatric patients included.

Furthermore, states such as California, Florida, Oklahoma, Oregon, Maryland, Massachusetts, Virginia, and Washington all also recognize autism as a debilitating condition, allowing doctors to recommend medical cannabis.

A vote against adding this condition would restrict patients in severe need from even discussing this option with their doctor.

Of the existing qualifying conditions in Ohio, many of them are comorbidly implicated within Autism.

Including conditions such as PTSD, Tourettes, Seizures/Epilepsy, Chronic pain, TBI, Encephalopathy, IBS, Ulcerative Colitis, Chrons Disease, and other neurological conditions like Parkinson's and Alzheimer's.

Now, if autism is one condition entailing 10 out of the 22 qualifying conditions that are ALREADY approved for medical marijuana in Ohio, why is autism spectrum disorder NOT already a qualifying condition?

Pediatric cannabis is already approved in Ohio for a litany of conditions like **TOURETTES, SEIZURES, AND PTSD**.

Why are our kids the exception and subjected to such hesitation when our kids suffer from these conditions BECAUSE OF AUTISM?

## **Conventional Medicine**

There are no pharmaceutical medications that can safely and effectively treat the core symptoms of autism. Antipsychotics, risperidone (Risperidone) and aripiprazole (Abilify) are the only two medications that are FDA approved to treat irritability in ASD, often ineffectively.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4450669/>

In addition to developmental disability, many with ASD live with conditions and symptoms including intellectual disability, self-injurious behaviors, aggression, pain, SPD, apraxia, dyspraxia, epilepsy/seizures, mood/sleeping disorders, gastrointestinal/feeding disorders, inflammation, oxidative stress, and immune dysfunctions.

Therefore, individuals with ASD are often prescribed a variety of antidepressants, anxiolytics, antipsychotics, benzodiazepines as well as stimulants in off-label, untested combinations to treat symptoms.

<https://www.scientificamerican.com/article/autisms-drug-problem/>

These drugs have serious and fatal side effects and when given in combination, the risk of harm increases significantly. This means that their life expectancy decreases even **FURTHER** when exposed to these medications.

The three main killers of those diagnosed again, include seizures, suicide, and heart-related issues. All three of which are side effects of the FDA-approved medications including, suicidal thoughts, seizures, and heart complications such as arrhythmias, heart failure, and sudden death are ALL side effects listed.

Risperdal:

[https://www.accessdata.fda.gov/drugsatfda\\_docs/label/2009/020272s056,020588s044,021346s033,021444s031bl.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/label/2009/020272s056,020588s044,021346s033,021444s031bl.pdf)

Abilify:

[https://www.accessdata.fda.gov/drugsatfda\\_docs/label/2013/021436s037,021713s029,021729s021,021866s0221bl.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/label/2013/021436s037,021713s029,021729s021,021866s0221bl.pdf)

These are the ONLY two medications that are FDA approved to treat ASD, often ineffectively.

A much longer document would be needed to include the litany of side effects associated with the variety of additional antidepressants, anxiolytics, antipsychotics, benzodiazepines as well as stimulants in off-label, untested combinations to treat symptoms that our kids are exposed to.

Brain shrinkage

<https://www.sciencedirect.com/science/article/abs/pii/S0920996407001028>

<https://www.nature.com/articles/1300710?fbclid=IwAR0AWeNtUemadUA-vCzIXQvJjnW33D-7v-6fUSjQ4c0o3nXeehNwwXJE7LU#Sec11>

Benzos have been scientifically proven to have the same chemically addictive neurological response as opioids with an estimated 12,000 deaths from 1999-2017 occurring at the hands of Benzos alone. My son was prescribed Benzodiazepines (Klonopin), along with various other very dangerous and harmful medications as young as five years old that ultimately worsened his condition.

[https://en.wikipedia.org/wiki/United\\_States\\_drug\\_overdose\\_death\\_rates\\_and\\_totals\\_over\\_time](https://en.wikipedia.org/wiki/United_States_drug_overdose_death_rates_and_totals_over_time)

<https://www.theatlantic.com/health/archive/2017/03/autism-and-addiction/518289/>

We are unknowingly breeding a new generation of addicts in medically fragile children like my son, who has NO idea what addiction even is or how dangerous.

Cannabis medication in comparison is vastly safer, with fewer side effects and far less addictive.

Of the existing qualifying conditions in Ohio, many of them are comorbidly implicated within Autism. Including conditions such as PTSD, Tourettes, Seizures/Epilepsy, Chronic pain, TBI (Traumatic Brain Injury), Encephalopathy, IBS, Ulcerative Colitis, and Crohn's Disease.

It can be seen that Autism is one condition that comorbidly encompasses many of Ohio's existing qualifying conditions already approved for the OMMCP.

So my question is this, why is autism spectrum disorder NOT already a qualifying condition? Pediatric cannabis usage is already approved in Ohio, yet our kids are the exception and subjected to such hesitation when our kids also suffer from these conditions comorbidly.



## Conclusion

We are parents of children with Autism who are interested in legally pursuing medicinal cannabis as a safe, and effective therapeutic treatment option for our medically fragile children.

To that end, I am here to advocate for the legalization of therapeutic cannabis for ASD. To educate families, doctors, legislators, and the general public about its many benefits. We believe it is our right to legally access the all-natural plant cannabis in its entirety, in all its various medicinal forms as a therapeutic remedy for autistic children and adults. We advocate qualifying conditions for cannabis therapeutics include a diagnosis of autism and comorbid conditions.

Given the known role of the ECS system paired with the documented deficit of anandamide in those diagnosed with ASD it seems entirely possible, if not likely, that cannabinoid-rich botanical extracts from cannabis can be utilized as useful agents for not only targeting the pathology of ASD but many debilitating symptoms associated with it.

I believe that families and physicians should have the authorized right to explore these options without fear of legal repercussions, despite the age or severity of Autism Spectrum diagnosis.

As a society, we must not only observe AND acknowledge what we can do to improve the quality of life for people with autism in Ohio, we must act with urgency. The cost of not doing so is far too great. Many families are having to become medical refugees in legal, autism-friendly states.

This should not be our fate.

We believe there is strong and substantial scientific evidence that supports the use of medical cannabis as a safe, viable treatment for autism spectrum disorder. There are several Ohio physicians and scientists who agree and have provided expert testimony on the matter.

A vote against adding this condition would restrict patients in severe need from even discussing this as an option with their doctor.

Please vote with a majority of the national and international experts who support the addition of autism as a qualifying condition. I urge you to consider the evidence and will of Ohioans to add Autism Spectrum Disorder to the qualifying condition list. Attached is a growing list of thousands of constituents in favor of this legislation. <http://chnng.it/cFvqtYMP>

<https://www.change.org/p/grant-access-to-medical-cannabis-to-those-diagnosed-with-autism-in-ohio/dashboard?download=8b682a7b-a0e5-4325-ada1-edf8ae55d6f4>

Thank you for your time and consideration on this matter.

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