## Lauren 00:06

Welcome to the LDA podcast, a series by The Learning Disabilities Association of America. Our podcast is dedicated to exploring topics of interest to educators, individuals with learning disabilities, parents, and professionals to work towards our goal of creating a more equitable world.

#### **Lauren** 00:23

Welcome to the LDA Podcast. I'm here today with Dr. Vincent Alfonso and we are here to talk about ADHD. So Vinny, thank you so much for being here.

# Dr. Vincent Alfonso 00:31

My pleasure. Thanks for asking me, Lauren.

## Lauren 00:34

So can we just have a little bit of your background?

## Dr. Vincent Alfonso 00:37

Sure. So right now I'm a professor in the school psychology program at Gonzaga University in Spokane, Washington. Prior to that, I held a few administrative positions. I had been involved with, I would say developmental disabilities and developmental behavior disorders almost since the time I entered the field as a as a psychologist and have read and kept up with a lot of the data and information on ADHD, and certainly on LD, and in the not too distant past, I presented a workshop or seminar, if you will, on comorbidity of ADHD and LD with my good friend and colleague, Dr. George DuPaul of Lehigh University. So happy to be here and to provide listeners with some information that they can use.

#### **Lauren** 01:37

Alright, so let's start off pretty broad here. What is ADHD?

## Dr. Vincent Alfonso 01:42

Yeah, it's a good way to start, actually, because I think that ADHD has kind of become, I don't know, sort of a term that just people use loosely without understanding what it is exactly. It stands for attention deficit hyperactivity disorder. It's been around for a very long time as a diagnostic category. The criteria for diagnosis have changed over time from one DSM, which is the Diagnostic and Statistical Manual of Mental Disorders. It's in its fifth edition, I think, text revision, but by and large, it's the developmentally inappropriate frequency or severity of inattention, and hyperactivity, and/or impulsivity. So the hallmark criteria are inattention, hyperactivity, impulsivity. Typically, the onset is before age 12 years, however, there is what we call adult onset ADHD, which manifests differently than childhood. But there's also folks who were not classified, diagnosed, misclassified or diagnosed earlier on, and may have had ADHD, which makes it a little bit difficult to tease out the research. Also, another criterion is that the difficulties need to be or take place across two or more settings. Usually, it's the home and the school, you really do need multiple settings. Otherwise, it could be a situation or setting-specific difficulty and not necessarily ADHD. Oftentimes, the associated difficulties or challenges occur in the academic, social, or occupational worlds. The criteria or the symptoms, if you will, an impairment, lasts a long time, they have to last at least six months in order to make the diagnosis classification. Just as a side

note, ADHD is pretty much a lifelong challenge, if you will, but manifests itself differently over time. And then the last criterion is that it's not better accounted for by another disorder. And this is something I think is really important because, you know, we're all inattentive at times, we're all impulsive at times, or hyperactive, or we become distracted. And that could be because we're anxious or there's some kind of crisis going on, or something like that. So that's why you need to have the greater than six months across multiple settings. Just a few other notes here that I have. So there's no single cause of ADHD but there is a fair amount of research supporting a genetic base or basis to ADHD, it tends to run in families. Children with ADHD demonstrate different brain structure than those without ADHD, that comes from our neurological and neuropsychological studies that have been coming out, especially in the last, I would say the last 10 to 20 years. And also prenatal exposure to toxic substances, nicotine, alcohol, and other drugs are associated with an increased risk of ADHD.

#### Lauren 05:24

Okay, well, and you mentioned that it can present a little bit differently in adults and children, are there different types of ADHD?

## Dr. Vincent Alfonso 05:31

So again, nothing simple. So the types or the subtyping has changed over time. But if you read literature, the research will oftentimes see three different types or major types of ADHD. One is an ADHD combined type. This is the most common type and it typically involves impulsivity, hyperactivity, as well as inattention and distractibility. So it's really, when people think of ADHD, I would think they oftentimes think of this one, the combined type, this overall kind of holistic disorder, or difficulty. And then there is impulsive hyperactivity. So that's more of the movement type, or the behavior that teachers and parents oftentimes discuss or talk about, because the kids are not sitting in their seats. they're dropping things from their desks, they're completely disorganized, blurt out answers, all those kinds of things. And the inattentive and distractible type, that's the third type, that's typically associated with inattention and distractibility. So you don't see the hyperactivity or impulsivity as much, but you see, sort of drifting off into space, not paying attention and ability to sustain attention, that kids, children, students, are distracted by outside noises by other students in the room, that kind of thing. So, it's just really important to understand the developmental progression of the disorder. And I'll talk a little bit more about that in a few moments. But I worked in a preschool for many years, a preschool with children with special needs, and trying to tease out like, when a student or young person had a challenge or difficulty that was consistent with ADHD versus just normal development. I used to kind of do teacher consultation, and I'm like, these children are three years old, they're not supposed to be paying attention. So the developmental progression and developmental nature of human beings needs to be kept in mind, I think at all times.

# Lauren 08:08

Definitely. So what are some, either accommodations or treatments that people can use to help with ADHD?

#### Dr. Vincent Alfonso 08:16

Sure, so I think, pretty much hands down the combination of stimulant medication, sometimes called pharmacotherapy, and some kind of behavior management technique. The combination is clearly the

leading treatment, especially for school age individuals. There's also, when there is comorbidity, and we'll talk about that too, momentarily, sometimes it's best to target the academic skill deficits and the challenging behaviors at the same time. Because in that situation, that's the highest probability for improvement in the academic and behavior domains. The disadvantage is that it requires a lot of resources, intensive intervention. And then the more, I don't know, intricate the intervention, the greater the possibility of treatment infidelity, in other words, that we're not following the regimen. But you certainly could target behaviors solely or academic skills solely. There will be some generalized effect in the other domain. But I happen to think that if we can provide interventions on the academic side and the behavioral side at the same time, with fidelity and in cooperation with families, this is for school age, of course, then I think the prognosis is pretty good. Also, the prognosis for children with ADHD is better when they have average or better intelligence, they have good reading skills, and they have supportive, nurturing families or caretakers, and that their behavior is not aggressive, and that they have some typically developing peers. That's not always the case. And I know later in the podcast I'll talk about who might be at risk from different demographics.

## Lauren 10:34

Definitely. Well, and that leads right into my next question, which is, how common is it to have both a learning disability and ADHD?

## Dr. Vincent Alfonso 10:41

Yeah, so, I wish I could be very specific, but in the studies that we've looked at the median range is from about 30-31% in one study in samples between 1978-1993. And then in another study it was 38.2%. And looking at samples from 1982-1993, and 2001-2011, the median was 47%. The ranges are all over the place. And part of that is just due to difficulties and changing diagnostic criteria, the definitions of primarily, I guess, ADHD. The definition of LD hasn't changed very much, the federal definition but of course, states interpret the definition of LD differently, and they certainly are engaged in multiple methods of identification. So you have this wide range. I think everybody, however, agrees that it is common for school age students to have ADHD and some type of learning disability. And that is a big challenge for teachers and parents, certainly, and then also siblings, other students in the classroom, and so on. And the reason for this high comorbidity, reasons I should say, is that there's probably a shared genetic predisposition and underlying neurophysiology for ADHD and LD. Also students like K-12, may acquire academic skill deficits because of the ADHD behavior. So they're not paying attention, they're hyperactive. And those behaviors interfere with learning. So they may also then have academic difficulties that eventually manifest as a learning disability. Also, students with LD may exhibit ADHD behaviors because they cannot understand the subject matter. Or they're not motivated to learn because they have a learning problem, challenge or disability. So they wander off, they drift, they're not paying attention. So then they may exhibit the ADHD symptoms. But I would say, from my read, that the main reason for high comorbidity is there's probably an underlying neural substrate that accounts for the two disorders.

# Lauren 13:37

That's good to keep in mind, especially if somebody is only diagnosed with one, to look out for the other. So you touched on this a little bit, but can ADHD affect an individual with learning disabilities

differently than somebody who doesn't have a learning disability? Or is it just pretty much the same across the board?

#### Dr. Vincent Alfonso 13:56

Yeah, this is a great question. I think that within many disorders, disabilities, whether it's intellectual disability, learning disability, ADHD, I think the main rule of thumb is individual differences and that each of these disorders is on a continuum. And we need to keep that in mind. So it's very difficult to isolate or pin down the two prevalence rates, given the limitations of our diagnostic systems, and the fact that there is high comorbidity. So, it just makes it especially challenging to do differential diagnosis and also to determine if the comorbidity exists. Pure ADHD is rare. ADHD typically has comorbidity with other disorders. Of course, we're talking about learning disorders or learning disabilities, but it can also occur with other behavior disorders. It can also co-occur with anxiety, depression, and so on. As you can imagine, there's also long term deleterious effects. This is comorbid ADHD, long term deleterious effects on academic, social, and behavioral functioning. And so, again, it's very challenging. You have to be very skilled and very knowledgeable in each disorder in order to do a good differential diagnosis or to say that the two disorders are coexisting, which is comorbidity. There's significantly lower report card grades and academic achievements throughout schooling. Children or students with ADHD, when they enter elementary school, they're behind their peers in reading and math, and the academic performance deficits continue through high school and into college. So there are these long term effects. And I think it's pretty difficult to say that students, children or even adults who have ADHD and a learning disability, that they look just like this. I think that there's a lot of individual differences there. And I would probably say that having each disorder, having that comorbidity, is more challenging for everybody involved than to have either one or the other.

## **Lauren** 16:47

So, what are some of the signs of ADHD that you would be looking for, to be able to sort of tease out that diagnosis? And are the signs, I mean, they're probably different in children than adults.

## Dr. Vincent Alfonso 16:59

They are different. And so a lot more attention has been given to adult onset ADHD or adults with ADHD than in the past, and I can't really explain that. Probably socio-cultural and economic reasons for it, but it's a developmental progression. So for kids and students, let's just say K-12, overactivity decreases with age and becomes more of a restlessness. So you'd see more of a restlessness with adults also, as age increases, the risk for mood disorders increases. So anxiety, depression, and so on, either directly or indirectly result of the ADHD. Many adults who had ADHD when they were younger continue to show some symptoms, it doesn't go away. It's really a lifelong disorder, ADHD is, and we know that LD, especially in the severity, those who have severe learning disability or disabilities, those are lifelong as well. So when you have this comorbid ADHD and LD, and if each is rather intense, that's going to be tough, it's going to be difficult. It's not impossible to treat, not impossible to ameliorate the symptoms. But there's going to be some challenges that continue throughout the lifespan.

## Dr. Vincent Alfonso 18:45

So children who grew up with it, so they've been diagnosed, classified in their school age years, are more adversely affected in the educational careers than clinic-referred to adults with ADHD. So in other

words, they had ADHD when they were younger, they have more adverse effects in their educational careers. Adults with ADHD, in other words, adult onset compared to children or students who had ADHD in their younger years, are less clinically impaired. They have higher intellectual levels, less achievement difficulties, higher graduation rates and are more likely to attend college. So what I'm trying to express here is that if you had ADHD in your school age years, and it will continue in the adult years, typically you're going to have some more difficulties in the adult years, as opposed to if you've just had adult onset. But adult onset or students who were diagnosed early on in their school year, they're rated lower in occupational functioning and occupational success earned income. If you grow up as a child or student with ADHD it's typically lower job status, fewer current working hours per week, they're absent from work, they have more time away from work than folks who do not have ADHD. Children and adults with ADHD tend to have more negative communication styles, less positivity during conflict resolution. Adults with ADHD, again, whether it's adult onset or not, report less satisfaction in their relationships, marital relationships, partner relationships. So although there's a lack of clarity on ADHD and divorce, you can imagine that if there are financial challenges and work challenges, and interpersonal relationship difficulties, they may indeed affect the marital or the partner relationship. And so there seems to be some evidence that adults with ADHD have a higher prevalence rate of divorce, but the verdict is kind of still out on that. Again, I've talked about financial management problems, impulsive buying, use excessive use of credit cards, lower credit ratings, and so on, because of the impulsivity, because of the hyperactivity or the inattention or not paying attention to prices and pricing, and so on, and so forth. So there are several associated difficulties in adulthood that aren't present in school aged years simply because an eight year old doesn't have a credit card and is not married. But I have friends who clearly say that they're adults with ADHD, and they're highly successful. And that's a point that I will bring up in a little while too. But for now, I just want to say that many folks with ADHD, adults with ADHD, are successful. They do do well. I'll talk a little bit more about that momentarily.

#### Lauren 22:20

Well, I just had a question about onset ADHD. So is that when you're diagnosed, sort of later in life? And does that mean that you've always had the ADHD? Or can it come on later?

# Dr. Vincent Alfonso 22:31

That's a great question. So I think both. I think that there are individuals who were not classified or diagnosed early on and they were able to accommodate or somehow get by in school, or it was on the less severe end of the continuum, and now they're in the work world. And we live in a very high tech society, which requires a lot of attention and so on. And so they may be having an effect, but there is data too that adult onset wasn't present earlier on. I don't happen to know a super amount about that. But I do know that's the language we use, adult onset of ADHD. Whether it was misdiagnosed, misclassified, or it just happens in adult life, which is contrary to the diagnostic criteria of onset, early age onset, but here's what we know. If you're showing those behaviors, demonstrating those behaviors, we would be remiss not to diagnose or classify ADHD in adulthood, even if we're not sure about childhood.

## Lauren 24:04

Right. Okay, that makes sense. Well, speaking of diagnosis, can it be harder for certain demographics to get an ADHD diagnosis?

# Dr. Vincent Alfonso 24:13

So I struggled with this question a little bit, but I gave it some thought, looked up some research, and so on. So there is some evidence that ADHD behaviors tend to be exacerbated in children with chronic illnesses, intermittent hearing losses, substance abuse problems, and in neurological problems. Also, boys with ADHD tend to display more aggressive and oppositional behaviors while girls, again, tend to demonstrate greater intellectual impairment, less hyperactivity, and lower rates of externalizing behaviors. So that's just a little bit of data on some differences across people. It is common for children with ADHD to experience a more negative family environment than children without ADHD. So that leads to more challenges and more difficulties. Also increased risk for ADHD is associated with lower socioeconomic status, foster care placement, larger family sizes, marital discord, poor communication and problem solving among family members, maternal psychopathology, and paternal antisocial tendencies. So I don't know that it's a lot harder. I think that there are folks from certain backgrounds and environmental stressors, just like with many other disorders, who are more prone or have a proclivity towards ADHD, and probably LD in the comorbidity. But given the neurological substrates and foundation and the genetic component, that's very strong, I don't really know that if you're of a certain racial or ethnic background or language background, that you're more prone, less prone to be classified or diagnosed as ADHD. I would think that, again, anyone doing an evaluation of a student who is suspected of having ADHD has to do a very, very thorough assessment and evaluation, including cultural and linguistic factors and so on, which may impact one's interpretation of functioning. So, yeah, I hope you're all getting the point that it's not easy. But there are, I think, the more severe the behavior problems, the kind of easier it is to maybe determine ADHD. Same thing with LD, right, the more severe it is, the kind of easier it is to pick up. It's really, when you get talking about folks who have more subtle kinds of behavior, or the behavior isn't so intense and not as pervasive, then it becomes questionable and difficult. And that also then impacts the comorbidity rates and the research on interventions. But I will say this, that those who work with students suspected of ADHD or LD, and those who are very familiar with each of those disorders, I think those are the folks you want to really have your evaluations conducted by very knowledgeable, competent experienced people, because they do have that experience. And not that they can just look at somebody and make a decision, but they have a lot of data, a lot of local norms, and it's their area of expertise. And I think that it's really incumbent to go to somebody who's got that knowledge base.

## Lauren 28:32

Definitely. So have you come across any common ADHD myths that you think need to be cleared up?

## Dr. Vincent Alfonso 28:39

Yes! So contrary to some people's thinking, food additives, sugar, or fluorescent lighting do not cause ADHD. I'm not sure you want to give a lot of sugar to a student who is hyperactive or impulsive, but it doesn't cause the disorder. I think another one is that individuals can control their behavior without interventions, like they're engaged in bad behavior or something. No, it's very clearly a self regulatory disorder. And that has its roots in their neurobiology and probably has that genetic predisposition. So it's not like they're just choosing to misbehave or that they can control it. And of course, the more severe the more difficult it is to control, so now interventions are required if there's going to be any kind of amelioration or alleviation of the symptoms. Another myth is that ADHD goes away. Now we've

already talked about it really doesn't go away. It's a lifelong disorder, if you will, or presents lifelong challenges and those challenges change over time. And again, depending on the severity, that will also have an impact later in life as to what are the challenges that come up because of it. Stimulant medication makes everything better...It certainly doesn't. I think it's fair to say that when it comes to psychopharmacology for children or students K-12, that we have the largest database, research basis, on stimulant medication, as opposed to, let's say, medication for anxiety or depression. I mean, we just have a real good handle on these medications, and they are very good. They don't necessarily teach students with learning problems or anything, but what they do do is make them more ready to learn, help them be more ready to learn. What's interesting is, kids, self sufficient students or children, they know their medication regimens, they know when they need it, and so on and so forth. And they also know when they're not on it, so they're very savvy about their medication regimen. And I am not a big fan of pharmacotherapy for K 12. But when it's needed, it's necessary, and it's helpful. And there are these positive side effects, like they're able to pay more attention, they have fewer behavior problems, I think, then I think it's good. I also think that you have to have a physician or what would I would call a pediatric neurologist or neuropsychologist who understands the impact or influence of medication on our younger folks in our world. So I think the other thing is, as I mentioned earlier about all individuals with ADHD are doomed, they certainly are not. As with most disorders, disabilities, the earlier we intervene, the better. And so it really is a good idea, even if a parent or a teacher is unsure as to what's happening but if there's, you know, a five year old who can't sit still is falling out of the chair, hitting other kids bothering, nudging fidgeting, all those kinds of things, where the teacher keeps having to call the student's name, because the student's not paying attention, it's definitely worth taking a look at because, again, early intervention is the way to go. It's the same thing with learning disabilities, the earlier we intervene the better because we want to change the path that they're on, we want to make it a positive trajectory, not a flat one, and certainly not a negative one where they become worse. So I'm all for screening, early screening, sometimes called tier one, universal screening for learning and behavior problems. I'm very passionate about that early screening, and there are definitely ways that we can do it efficiently, financially responsible, and then also be very helpful for those individuals. So those are some of the myths that need to be cleared up.

# Lauren 33:36

Well, then on the other end of the spectrum, from early intervention back to adults, if they believe that they have ADHD, What should their steps be? Is there a benefit to getting an ADHD diagnosis even when you're an adult?

## Dr. Vincent Alfonso 33:48

Absolutely, I think obtaining a comprehensive assessment and evaluation hands down again, someone who specializes in ADHD, somebody who, especially here with adult ADHD, I think consulting with professionals is really important. So maybe consulting with one's physician or general practitioner at first, just to have the conversation going and discussion. I think to also have to talk with family members and get a sense of, what do you think, what are you seeing, do you think I do this, or are you seeing signs that you didn't see before, something along those lines. But I think, without an evaluation, and it needs to be comprehensive, I think you're not going to know. I think that the benefit, this is for students as well, especially middle school high schoolers, going through that experience, they learn a lot about themselves, so they can become their own self care individual and I think it's really important for

people to know what's going on with them. And I think that that actually could be part of the intervention. And then the benefit of getting or having a diagnosis is that these folks probably know, or probably thought that they had it for a long time. So now it's like, okay, now I know. Also other people in their lives may understand them better and have more patience. So it may improve interpersonal relationships. Also talking to their employer might have some benefits as well, once they learn that they have ADHD. And they can just prepare better for new work, new jobs, new relationships, and so on. So I think there's a lot of benefits to being diagnosed correctly, even if it's an adult. Definitely.

#### Lauren 36:07

Well, and then my last question here, tell me if I'm wrong, but I think there might be some controversy around ADHD and it as a diagnosis as sort of being like a fad diagnosis that, you know, every kid has ADHD? What are your thoughts on that? And do you think that the controversy has passed? Or is it still ongoing?

#### Dr. Vincent Alfonso 36:28

Yeah. So you know, no doubt that in my mind anyway, that it was kind of a fad diagnosis, or it was the diagnosis du jour, the diagnosis of the day. I don't know my French and all that. But I think that was very common and it was, again, like, three year olds who wouldn't sit still during circle time. And I'm like, because I worked in preschools, and I'm like, why would you expect a three year old to be like, still or paying attention? I would be worried if that was happening. And if the opposite was happening, if they were just quiet and everything, because then I would think that might be some effective difficulty. But I don't know if ADHD was, quote, unquote, 'overdiagnosed' or 'over-applied' or whatever. But it certainly was, I hate to say it, but like an in voque classification/disorder, I think it's been replaced with autism spectrum disorder. That's a conversation topic for another podcast, because I think that's become sort of the diagnosis du jour. And there are some studies and some very good thought pieces, like articles on why there may be, because there's this like thinking or socio cultural phenomenon that autism spectrum disorders in such a high increase in the incidence rate, there's some evidence that that might not be the case. So anyway, I think that ASD, autism spectrum disorder, has kind of replaced ADHD in a way as a fad diagnosis. I don't think it pertains to ADHD anymore, but it is a serious behavior disorder needs to be studied for years to come. The negative effects on individuals, families, friends, and society can be great. So whether a fad or not, this disorder, or maybe it's a set of disorders, need to be taken seriously, addressed, and understood. And I think, again, kind of my final thoughts, when we do universal screening, early intervention, and so on, for any kind of developmental challenge, I think then we have a better chance for those individuals to live happy, independent, autonomous lives, but I think that also has a positive effect on our society as a whole, right? So it's kind of like the same thing with many, many disorders, and many physical disorders and medical conditions have behavioral roots. And whether it's alcohol, smoking, eating, and those can largely be controlled. ADHD and LD, cannot really be stopped from occurring, but the earlier we intervene, then the less likely that they're going to have great challenges later on, and increased probability that they're going to be good contributors to society.

# Lauren 40:11

Definitely. Well, I think that's a good note to end on. So Vinny thanks so much for being here for sharing your expertise.

# Dr. Vincent Alfonso 40:18

You are most welcome, Lauren and I look forward to the next, the next podcast

# **Lauren** 40:30

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