



## **Kids Health Matters Transcript**

### **Ep 6: Understanding ADHD part 1**

The Child and Adolescent Health Services respects and acknowledges the Whadjuk People as the traditional custodians of the land on which we work and of Elders past and present.

Hi and welcome to Kids Health Matters - a podcast where we meet experts from the Western Australian Child and Adolescent Health Service, which includes Perth Children's Hospital.

Each episode will dive into a range of topics and issues affecting kids' health and wellbeing and provide you with information on how you can best support them through their journey of childhood and adolescence.

#### **Host Dani Shuey (DS)**

Hello, and welcome to Kids Health Matters.

I'm Dani Shuey, broadcaster and mum of two and today we will discuss a topic that many families know all too well.

For these families it's a daily struggle dealing with children who have attention challenges, and who are affected by Attention Deficit Hyperactivity Disorder, otherwise known as ADHD. It affects one in 20 Australians. We also know most children diagnosed with ADHD may continue to experience lifelong symptoms.

In studio today I'm joined by my co-host Danielle Engelbrecht, nurse and mother of two high school aged children who I think will benefit a lot from this chat. Danielle, welcome... one in 20 Australians...

#### **Co-host Danielle Engelbrecht (DE)**

I know Dani, it's quite astronomical how many people are affected by ADHD and certainly I know as we come across everyday life, just how many of our kids and adults we might come across could actually have ADHD.

#### **DS**

To help us better understand ADHD, a condition we hear so much about, we are fortunate to be joined by one of our state's leading authorities on the subject.

Welcome to you, paediatrician, Dr. Brad Jongeling, Medical Head of the Child Development Service, which is part of the Child and Adolescent Health Service. Thank you for being here.

Brad, throughout this podcast you're going to provide us with insights into the support services available to children and their families. But firstly, let's go right back to the start. What is ADHD and how does it present?

#### **Guest Dr Brad Jongeling (BJ)**

It's one of the most common neurodevelopmental disorders that children face and it occurs in about 5% to 7% of children. There are differences worldwide about that figure and it depends on the criteria that's used.

The most common criteria we use is well recognised across the world. It's the one that's used to make diagnosis for all mental health and developmental disorders, and usually, children present with a combination of either inattention or hyperactivity or impulsivity, or a combination of both.

But it's not quite as simple as describing it in those ways, because the impact that those issues have on a child, both in school, and in their home life, and sometimes in relationships with peers and friends, can be quite significant. So we



often look for those elements, when making an assessment to determine whether the child meets the criteria for ADHD, because you need to see that there's impact on function.

It's not just the child who's struggling a little bit in class with attention and who gets a reminder on tasks; it's about a child who is struggling so much that even with a reminder and even with the supports that schools put in place, is starting to suffer in their learning, in their engagement with others, the way they relate to their peers, their friendships, or academic progress, and it really starts to impact their self-esteem.

The other thing to note is ADHD has what we call developmentally inappropriate symptoms. So in other words, we all know the difference between a child who's two or three; they're not going to concentrate for so long and that would be normal and normal childhood should never be treated, but we're only looking at those children who might be older, and their attention and ability to focus is quite out of keeping with what you might expect, and is starting to impair their development, so we really need to have a good understanding of those things.

**DE**

And Brad, is this a product of our modern-day lifestyle and bigger awareness around ADHD or has ADHD been around for a long time?

**BJ**

It's a really good question. There's evidence in both the medical literature and in fact, even in the lay literature about ADHD as a disorder with very different descriptions being present since the early 1800s, including a poem called Fidgety Phil from Germany in the 1700s. But it is important to note that while there are many pathways to diagnosis, and we'll talk about that later I hope, there are obviously environmental factors that also impact, and we need to be mindful of that as well.

Children with ADHD are sometimes pictured as that hyperactive, impulsive child who often gets into trouble, which is the Fidgety Phil we're talking about here. But the presentation is actually much broader than that.

Children with ADHD can be intelligent, amazing, creative, engaging and active with lots of ideas and skills, and sometimes they just need help in channelling and directing their energies, and that may be with therapy supports or sometimes it may be needing medication.

**DS**

It will be really interesting to chat to you a little bit later Brad as the episode proceeds about that stereotype that children with ADHD are just super disruptive and naughty when they actually can be, as you say, creative and talented. There's a lot of strengths you can focus on with them as well but we'll touch on that a bit later on.

**DE**

What is the impact that it can have on our families and our kids, and why do you think we need to treat it?

**BJ**

Well, ADHD can significantly impact on children, families, households, schools and even the broader community at times. Some of the most challenging aspects of the disorder are inattention, which is not concentrating; impulsivity which is not being able to control actions; distractibility which is when children are off task and get distracted by things around them; difficulties with their organisational skills like knowing where their pens and pencils are and remembering what they need to bring from home and school.

It has quite an impact because there are some studies which have compared having a child with insulin-dependent diabetes with having a child with ADHD and those studies show that sometimes it's more stressful for families of children with ADHD than it is in managing child with insulin-dependent diabetes, and we know how much that can impact on families.



When ADHD is not managed well, when it's left alone, these children are constantly being told no or told off and that has a really significant impact on their self-esteem and their emotions, their confidence with school, their confidence in their peer engagement. Later on, it can lead to school failure issues, issues with peer interaction, issues with relationships even into adulthood, as well as possible mood and anxiety disorders later in life.

So there's lots of issues and the one we worry the most about, of course, is risk of self-harm, which is also something that can happen with ADHD children, and in particular adolescents, when it's not well treated.

**DE**

How is it different from normal childhood and other developmental disorders?

**BJ**

This is where that concept that I mentioned at the beginning about developmentally inappropriate symptoms needs to be considered.

So what do I mean by that?

Well, it means that when a clinician or a paediatrician or a psychologist or a psychiatrist assessing a child needs to have a good concept of what is normal development; what is normal attention. So we talked at the beginning about a two or three-year-old child, who is probably going to stay on task five or 10 minutes before they move on to something else, and that's normal, and you would not make a diagnosis. But a child who's 10 or 11, who can only stay on task for five, 10 or 15 minutes, and then they get distracted by something else, is not going to function in the main school environment and will struggle.

And then you look at how they are going with the supports placed on them and whether they still have issues in that environment. So it's important to assess the child's developmental level, not just their age level. You might need to know about where their level intellectually or cognitively is at times, although it doesn't form part of the main assessment, and you need to consider that in making an assessment or a diagnosis.

**DS**

So what's the common age for diagnosis?

My son's five and there's times, and I'll be completely honest and transparent in saying that there are times where I wonder whether he does have ADHD because he can't sit still and is fidgety and doesn't stay on task. But then I know that as a five-year-old, as you say, that's probably just the stage of development that that where he's at.

**BJ**

Yes, we tend to not make a diagnosis until children are about six years. Occasionally, in children between four and six where there is significant hyperactivity and impulsivity and those are the children you see in the media, running across the road, climbing trees, up on the roof, down the corridor, making decisions that put them at risk. Sometimes we might intervene earlier in those children, but we would prefer to put strategies in place to support them rather than consider medication.

And there are good reasons for that, because medications can have more side effects in children aged four to six so we tend to wait until children are at least six years of age. A five-year-old, of course, will be able to focus for periods of time on things that they're well motivated for and are interested in. But when they're asked to do some chores around the house or to put their things away, they may well be off task and that is normal so it's really about picking up those nuances of how children behave and what normal development is that a paediatrician and a specialist needs to be able to do.



**DE**

When should we look at further investigation around the ADHD diagnosis? Are we talking about maybe towards the age of six you might be seeking some sort of intervention, or when is when is it the best time?

**BJ**

I think it really depends on a range of factors.

The most common time is once they start year one where there's a more structured school setting, because in a structured classroom many children who might have had some attentional challenges will do better.

In pre-primary and kindy there's more free play and so those kids can cope within that environment, but when you put them in a structured setting, while for some it will be helpful, for others it becomes very clear that they're not able to stay in their seat, they're not able to follow instructions easily, they're causing disruption to themselves or others, so it's often at that point we start to get referrals from parents or teachers or schools.

We also know that a more structured approach is generally helpful for all children. We will sometimes assess and treat earlier children at the more severe end of the spectrum; those that really have significant hyperactivity like I mentioned.

**DE**

Brad, you mentioned it's not very common to diagnose younger children with ADHD, but what concerns would you have around children who are in that younger age group, where would you perhaps need to make that diagnosis?

**BJ**

That's a great question, because often that's when parents start to be concerned about their child's behaviour, so in that age group we're often being referred children where there's concern about hyperactive behaviours or, or aggressive behaviours, or sometimes attention, although that's less of a thing.

The thing about this age group is that ADHD often can occur with many other issues, or in fact you can be confused by other issues, so you really need to assess whether a child has a developmental impairment or a delay in their development. In these children you often need to do formal developmental assessments; you have to consider whether they fit – they might have Autism Spectrum Disorder or language impairment - and so the approach to a child under age six is a little different from those older, plus you are getting information mostly from parents and maybe day care, and you've got less of the observations around school.

So these considerations about where are they in their development, what's their developmental level compared to their chronological age, or their actual age which is really important because that helps you interpret whether the child's behaviour is normal for their age or their developmental age.

There are a lot more social and family factors that impact on a child's behaviour at that early age that you need to take into account, and there may be things that you can both explore and support in assessing that child.

**DE**

And when our children do get to that age group, around age six and beyond, what kinds of behaviours do you think prompt further investigation?

**BJ**

Most parents have a pretty good idea, as do teachers, about what those things are.

We talked at the beginning about ADHD being essentially three forms in one, so there's the ADHD hyperactive impulsive group; there's ADHD inattentive group, and then there's the ADHD combined group. So presentations in



those vary a little bit, but essentially those children who have hyperactivity have difficulty sitting still for a reasonable amount of time, they have difficulty staying on task, they might be impulsive in their actions, they might be distractible to other children in class or disruptive at times, and that might not just be with schoolwork, it can be across a whole range of things. They're always fidgety and in particular they'll often have difficulty organising themselves like remembering things, but they might have difficulty organising what they need in class for an assessment or a test or what they need to take home so they're quite can be quite forgetful as well and we've got to be careful at what age you interpret this.

## **DS**

It's interesting. Dr. Brad, just to jump in here, I am a teacher's assistant. I did my course in 2020 and I worked with year one students and there was a child in that classroom who had ADHD and the strategies that teachers implement these days is pretty amazing to help a child cope with the environment.

I think there was mat time, for example, where they were required to sit and listen to a demonstration on the television, and he just could not sit still so they said to him, would you like to go and sit and draw at your desk, whilst also contributing to what we were doing in the classroom, and just by giving him another task, colouring in, drawing, he was able to still contribute to what they were doing, but he needed to be doing something else, if that makes sense.

## **BJ**

Yes and I think that's a really great example of accommodating the child's challenges. In that setting the teachers are doing exactly the right thing. They know this child has difficulty sitting on the mat staying still, they need to fidget a little bit and there's nothing wrong with fidgeting, and they're able to sit at a desk, do some other things. Kids with ADHD are quite able to multitask a little bit so they can keep an eye, some of them, not all, but some can keep an eye and an ear on what's going on and still contribute and so the teachers are managing and supporting that child in the learning so it's not disruptive for the whole class yet helping that child maintain his or her ability to learn. I think that's a really important thing.

I did forget to mention that some of these kids are kids who really do get into trouble in class; they blurt out answers, they get up and answer questions when they're not asked, they have no impulse control; it's not that they're doing it deliberately, it's just the way their brain functions which makes it very difficult for them to inhibit those responses, so that can be something that you see.

The other thing is that the symptoms have to be causing problems. So if they're in class and a little bit off task and the teacher can give them a reminder and get them back on task, then we wouldn't make a diagnosis in a child like that.

Another aspect to look at is normally these symptoms have to be there for at least six months, and usually longer. By the time a child comes to our service they've often been on a couple of years of a referral pathway but it usually needs to be before they turn 12 that the symptoms seem to be apparent, although there's a lot of discussion in the literature about adult onset ADHD.

## **DS**

I hear you talk a lot about those obvious ADHD symptoms which are kids bouncing off walls and racing around and not being able to sit still. What about children who may have inattentive ADHD?

## **BJ**

This type of ADHD is the less common and these children, as you noted, are not those who are racing around and disruptive; they tend to have difficulty staying on task in class, they might seem easily distracted and it's a challenge to diagnose because sometimes a child might be presenting with those features because of a range of other conditions or disorders or issues.

So it could be for instance, anxiety. Anxiety is quite a common mimicker for other diagnoses, so child with anxiety may be off task because they're worried about things, a little bit more hypervigilant because they're, they've got underlying



anxiety and they may present as looking like they have ADHD, but that may not be the cause and so we have to assess for that.

In addition though, children with ADHD, who are very bright, and there are many of those kids, might not be able to show that skill level. They might be in class and they know the work, but they'll have trouble staying on task for a period of time, or they're a bit distracted and so they can't get all the information out that they would normally be able to show and that makes them anxious. So anxiety can be secondary to the ADHD at times so we need to consider all of those factors in assessing a child who presents.

**DE**

Brad, I was really curious to see if there is any difference between boys and girls with the way ADHD presents. Is there a difference?

**BJ**

We know with most neurodevelopmental disorders, and I'm talking about autism as a key measure, that the diagnosis is often more common in boys than girls. So ADHD, we think, is about three and a half boys to one girl.

However, that statistic is a little bit dated because it goes to the key question about difference. Girls are less likely to be the hyperactive impulsive type; they're much more likely to be the inattentive type. Equally, they often are a little more mature naturally than boys at the younger age group, that's just a fact and so they can often manage much better for a much longer period of time in a class with the social demands, the educational demands and the learning demands.

And so for girls, sometimes it's only as time goes on, 'til they get to their upper primary school years, where you might start to appreciate, oh, actually, they've got some troubles here, they've got some difficulty staying on task and concentrating and it's when that educational demand, or in autism the social demand, starts to overwhelm the child, in this case, the girl's capacity to cope with it, that you start to see the functional impairment. That might be school avoidance, or it might be coming home in tears, or it might be anxiety issues, then you can say something's going on and it could be an ADHD diagnosis.

So yes, there is a bit of a different presentation, but at the same time, girls can still be the hyperactive impulsive type and they can still present in the disruptive behavioural way that some boys do although not all boys present that way, many of them also have inattention.

So yes, there's a slight difference and you need to be following a child over time. I think one of the really key things about assessment in these children is not an assessment at one time point, it's actually following them over time and understanding how they learn and how they progress and re-evaluating all the time for the right supports and treatments.

**DE**

I was really curious as to whether there is a link between ADHD and autism?

**BJ**

The answer is not completely straightforward. ADHD is a diagnosis that occurs with many other diagnoses so all the neurodevelopmental diagnoses overlap somewhat.

ADHD occurs with autism in about 30% to 40% of cases, and vice versa. So if you take a group of children diagnosed with autism, 30% to 40% and maybe 50% will also have ADHD. In addition, ADHD often occurs with high level language issues, like with comprehension. It can also occur quite frequently with learning disorders and as we mentioned earlier and with anxiety, you need to assess for both and support and manage those issues; you can't just focus on the ADHD as your only treatment.



**DS**

Dr. Brad do you ever speak to parents or caregivers or people who are concerned with their child having anxiety and not quite understanding the link between that and ADHD?

**BJ**

Yes, I think it's quite common that parents won't connect the link, although I have to say there are a lot of families who do. Some come in and note that their child is struggling and they'll think it's just the anxiety and then you'll say, well, actually, we think there's something underlying this that might be or occurring at the same time and both will need support or interventions.

I think it's really important to consider that ADHD has impacts on mental health function and we know that because there's really good evidence that children when they're not managed well early on, or at least in that primary school age, have a much higher risk of having anxiety or depression later in life so if you can manage and treat it, that makes a big difference.

**DE**

Brad are there any genetic traits around ADHD; would we see it in parents or grandparents and then the children?

**BJ**

Definitely, it's one of the most inheritable diagnoses and it's actually what's called a polygenic diagnosis, which means there are many genes that are involved in increasing the risk of ADHD; so it's not one single gene. There's no tests you can do for ADHD in terms of a blood test and there's also the influence of environments. So it does run in families.

We know for example that if one sibling has ADHD, the risk of another one there is about a 25% to 30% likelihood. If they're identical twins, it's more like a 60% to 90% risk and if one child has it, then it's likely that one of the parents in 15% to 30% of cases will have ADHD. In fact, it's probably the most common way parents come to a diagnosis. When their child gets a diagnosis and they see themselves in the child they say 'I was like that as a child', 'I remember struggling at school', and they recognise the symptoms and then they recognise that maybe that explains why they've had a little more challenge in being organised at home, managing the complex nature of working, being a home mum at times, or a home parent. They can become aware of all of those things and they think, 'Oh, I think I might need an assessment too', and we'll do that. That can be both transformative and helpful for them, but it's also helpful for the child at times, because it enables the parent to be more able to manage and organise the family or their work.

**DS**

If we go back to that statistic of one in 20 Australians having ADHD, is there still a stigma around it?

**BJ**

All neurodevelopmental mental health issues can have or have had in the past, stigmas associated with them, so it's a difficult question to answer because in the area that I work, we would not have that view at all. As we've talked about these children can be creative and energetic and full of ideas and there are many successful adults in the world who have ADHD who cope amazingly well. Michael Phelps is an example of one of those and there are plenty of others that we could choose.

But of course, ADHD has real world impacts on how someone might achieve and therefore, having a diagnosis for that person can be really important and transformative. Someone sitting on the outside might not understand all those internal challenges that a person has had and the difficulties they've had to overcome to achieve the successes they've had.

And there's good evidence, as I mentioned earlier, that if you have an ADHD diagnosis and you haven't been treated, your risk of mental health issues can increase significantly. So treating the ADHD may actually help all those other



things and you don't always see in a person, the underlying mental health challenges that they have, because they hold them in.

So yes, while it can have a stigma, I think in the most recent years there's has been a lot of positivity, particularly in the last two years in the media around ADHD. It used to be that media was very critical of the diagnosis of ADHD and I think that was a misunderstanding about how much of an impact it this can have on children and adults. I think this is changing and there are groups like ADHD WA, a really supportive parent support group, and the ADHD Support Group which have done some really great work in providing support for families and people with ADHD.

## **DS**

There is a lot to unpack on ADHD and we'll get to all of that in part two; we'll chat about the steps to diagnosis, pathways, medication, and more on the next episode with you, Dr. Brad Jongeling. Thank you very much.

Nurse Danielle Engelbrecht, thank you. We'll see you for part two on ADHD on Kids Health Matters next time.

Thanks for listening to Kids Health Matters - a podcast produced by the Child and Adolescent Health Service. You can find more information and links to useful resources in the show notes for each episode. You can also email us with any feedback at [kidshealthmatters@health.wa.gov.au](mailto:kidshealthmatters@health.wa.gov.au).

