Episode 9 – Childhood Vaccines & Autism

With Dr. Elizabeth Margolis

Deon (00:00):

In Vax Matters, we're digging into what matters most about vaccines. Hi, everyone. Thanks for listening. I'm Deon Guillory. This episode of Vax Matters is brought to you in part by the Autism Society of Greater New Orleans. They aim to serve the entire autism community in the Greater New Orleans area and their loved ones by providing connections to the support they need when they need it. They work to create connections in the community through information and referral, resource development, online social and support groups, community events, and more. Listeners can find out more by visiting asgno.org.

Deon (00:43):

As you may have guessed, this episode answers a highly discussed question. Do childhood vaccines play a role in causing autism? Joining us to get to the bottom of it is Dr. Elizabeth Margolis, Doctor of Osteopathic Medicine at Tulane University School of Medicine in New Orleans. Now, her background includes care for individuals with intellectual and developmental disabilities, as well as early childhood development, which, obviously, makes her the best choice as our guest for this topic. Welcome to Vax Matters, Dr. Margolis.

Dr. Margolis (01:15):

Thank you so much for having me. I'm super excited to talk to you about this really important topic.

Deon (01:21):

Yes. It's very important, and I'm, I'm excited that you're excited because, you know, this has been a, a huge topic for quite a while, and, of course, with the-

Dr. Margolis (01:30):

Mm-hmm (affirmative).

Deon (01:30):

... um, COVID pandemic, uh, it's kind of, uh, gotten much bigger. Uh, so, and this is a very important topic that we're gonna talk about. So, let's get into it. You know, as we think about, uh, vaccines and autism, why don't we start with autism itself? Could you tell us exactly what autism spectrum disorder is? It's, you know, it's also known as ASD, and, and what does that mean?

Dr. Margolis (01:56):

Yeah. That's, that's a great question. I think a lot of people have heard the word autism thrown around from, um, healthcare providers, from just maybe, you know, other parents, people in the community throwing those words out, but don't really know what it means, um, and from a scientific standpoint and kind of just, like, a basic understanding, it's a neurological and developmental disorder that affects how people interact with others, how they communicate, how they learn, and how they behave, um, and so I say, "Neurological," it's related to the brain and a developmental disorder, which means it's something that, um, we see during a child's development. Um, so, that's usually in those first couple years of life, um, really from zero to two.

Deon (02:46):

In, uh, autism spectrum disorder, when was it first discovered? When did doctors realize that this was something that, you know, a child was dealing with?

Dr. Margolis (02:55):

So, it was first described probably around the mid-1900s, um, but the truth is is that the symptoms of autism have been described in having, had occurred well before that. It was just in that mid-1900s time period that, um, physicians and scientists really started to investigate more, come up with kind of more, uh, succinct ideas on how they thought you should, um, diagnose and treat a patient who has autism. In 2013, that's when our American Psychiatric Association provides the diagnostic criteria for autism. And so I think that in really the last 10, 20 years is when, uh, you know, the community, in general, has heard more about autism, and what, what this changed was to is a broadening of the so-called spectrum and, um, kind of really opening up, um, the, the children and adults who would fall into this diagnosis.

Deon (03:59):

Hmm. And it makes sense because, you know, as of late in that period of time that you mentioned, you hear more conversations about it and more people learning about it, you know, uh, if they have a loved one, if, if a parent has a child who may be on the spectrum, trying to understand how to make their life as comfortable as possible, uh, with that. So, it, it, it really makes sense that, you know, it happened within that period of time you mentioned because the conversations that have been, um, growing over the last few years.

Deon (04:29):

Uh, in the 1990s, let's go, let's go back to that decade. It's a decade I like, uh, but, you know, in the 1990s, the understanding of autism spectrum disorder greatly expanded, and we also saw an increasing trend of diagnosis for ASD. Was this because there was a better understanding of milder cases and could better recognize them, or was it because there is something in the environment that may have been causing it?

Dr. Margolis (04:58):

I, I'm glad that you asked this question, um, because it comes up a lot, and I think not just with autism, but with a lot of, um, mental health diagnoses, in general. You know, we have pre-1990s, there was so much stigma around all these diagnoses that they weren't being talked about. They weren't being, um, diagnosed. They weren't being treated, um, as, as, significantly as they are now. So, in the 1990s, uh, absolutely, there was this period where, uh, physicians really continued to progress in recognizing autism and for finding the diagnosis, and this has really led to those increased numbers, um, and I think it's important to point out that we now know with autism, early intervention is, uh, really key to the success of a patient diagnosed with autism.

Dr. Margolis (05:51):

So, what that means is the earlier that you diagnose and recognize that a kiddo has autism, and we do treatments and therapies and so, you know, all of that kind of stuff, uh, the better that they'll probably function later on. And so that push by pediatricians and psychiatrists to diagnose early, obviously, is associated with an increased, um, number, like, incidents or prevalence of autism.

Deon (06:20):

Mm-hmm. And then, uh, I'm glad you mentioned the fact that ear- early diagnosis and knowing how to treat the child in order for them to, you know, just be a part of society because that's what every parent wants for their child anyway, just for them to grow up, be healthy, and, you know, be a part of society, and, you know, whether it's a particular job that they want to, you know, create their dreams, have their dreams come true, that kind of thing, that's all parents want. And so that early diagnosis can help with that.

Dr. Margolis (06:49):

Yeah. And, and I think anybody out there who, uh, has a child with autism, who has a family member with autism, who knows somebody with autism, um, can attest to the fact that autism doesn't mean that you're not gonna be a successful person-

Deon (07:06):

Mm-hmm.

Dr. Margolis (07:06):

... who contributes to society and forms relationships and lives a happy life. Um, and so I think it's just important to point that out. Um, it's called spectrum for a reason. There's just really this wide, vast, uh, you know, group of people who fit into this diagnosis, but that doesn't mean that they're not happy and, and functioning kids and adults.

Deon (07:30):

Yeah, definitely, uh, just, just, just like everybody. You know, the ... People just want to, to be happy and live a life, you know, and, uh, that's the, the great thing about you mentioning that early diagnosis in order to help that, uh, become a reality. Um, so let's talk about this, uh, part of, uh, uh ... 'cause, you know, our, our show here is about vaccines, and un- un- unfortunately, there's been this group or groups of people who have put out a fear about vaccines, um, of various kinds, um, causing autism in children, and we know that's not true, um, but where did this even come from? Because it's, it's something that has been around for quite a while, and it doesn't ... It seems as though it, it comes back up every now and then, uh, even especially with the pandemic. Um, tell us what was the root of, of that and how it just spread like wildfire.

Dr. Margolis (08:43):

I see plenty of parents who, um, worry about what will this vaccine do to my child, um, and in 1998, Andrew Wakefield, who's a, um, physician in the United Kingdom, and some of his colleagues published an article, um, in a journal called The Lancet, which found that there were a few children who had autism, and that was associated with, um, the, the, a certain vaccine, the MMR vaccine. Um, and so, you know, after this, uh, paper was published, that group of people who really fear vaccines and don't wanna give vaccines or get vaccines, um, were able to really use, uh, this, this article essentially as support for why, um, children shouldn't get vaccinated.

Dr. Margolis (09:33):

Um, I think it's important to talk about, uh, kind of the result of this paper and the thing that happened after, um, which, you know, a lot of people will bring up this paper, but forget to mention that this physician lost his medical license. Um, his research was funded by lawyers hoping to s- sue vaccine manufacturers, uh, manufacturers, um, that there was some question about him receiving, uh, you know, finances and money, uh, related to single antigen vaccine. So, um, you know, it certainly is a

very muddy picture, and, you know, all the studies that have come after have disproven what he wrote in this paper.

Deon (10:18):

Yeah. It's, it's ... A- and we were talking before we started this conversation, and it is just c- mind-boggling how this one paper caused this, and, uh, you know, you can't, you can't, um, fault a parent for having questions about a vaccine and what it could do to that child because, of course, they want the best for their children, but you gotta trust the science. The science is there. Um, so, uh, you know, that's, that's the important part, trusting the science and trusting the pediatrician that you're asking those questions to, and I'm, I'm, I'm, I'm glad you mentioned, you know, you as a pediatrician. What are some of the resources, uh, that parents can find, um, for, on vaccine safety? Because it's, it's, it's so important, and as a parent, you know, no matter what it is, (laughs) you worry about your child because it's, uh, you know, it's your child, and you're, you, you, you want the best for them, but what resources can parents seek out in order to find, um, information about vaccine safety?

Dr. Margolis (11:24):

The CDC is a great option, the Center for Disease Control, um, the NIH, the American Academy of Pediatrics, um, the New Orleans Society of Autism, uh, and your pediatrician. So, uh, you know, I think the best ... I think, yes, you can Google. Go to the CDC. Go to the NIH. Look at these kind of reputable sources to explain why these vaccines are important. What are the risks, the benefits, etc.? Um, but also having this conversation with your pediatrician. That's what they are there for. That's what we're trained to do. We wanna talk to you about why these vaccines are important, how they work. Um, and so that's gonna be, I think, the most useful resource.

Deon (12:12):

Mm-hmm. And then, and, and, and don't be afraid to ask whatever questions necessary because, like you said, that's what you, you guys are trained f- in, in doing, and that's what you're there for, to answer any of those questions.

Dr. Margolis (12:22):

Absolutely. I think, you know, uh, the physicians that I know, all the pediatricians that I know, we love to talk about this stuff. I, uh, you know, I will get so much out of every time I can, um, you know, teach someone about a vaccine and why it's important and how it's safe and all those kinds of things, but, you know, that's part of my job, and we wanna do that.

Deon (12:48):

When do children typically get diagnosed with autism? Because I know, you know, you mentioned the, the, the spectrum and, you know, early diagnosis, of course, is always best, but what, what is the age that typically, um, autism may be found in a child?

Dr. Margolis (13:02):

Wanna preface this, uh, sort of next answer as a pretty important one, um, mostly because that time of when autism in diagno- is diagnosed lines up with the timing of when children usually receive the majority of their vaccines. Um, and so autism is typically diagnosed, uh, between zero and two years old. Pediatricians screen, um, between 16 and 30 months. There's, uh, some really great tools that we use to screen. Um, uh, any- anyone who has children, uh, this should have been done in your pediatrician's office. It's called the Modified Checklist for Autism in Children, also known as the

MCAC. Um, and so what this screen does is it looks at, uh, essentially the development of your child and, um, will monitor if they're meeting specific milestones, and if there's any concern, uh, for autism will be further diagnostic testing done by your pediatrician or they'll re- refer you out for that, um, and that's done in the first two years, and I think that's especially important to recognize because this just happens to coincide with when children are getting the majority of their vaccines, but doesn't mean that the vaccines are causing autism.

Deon (14:26):

Mm-hmm. Yeah. That, that's a great … I'm, I'm glad you mentioned that in order just to kind of get that understanding and clear that up because, you know, if someone may have heard that, then they would have probably tried to put two and two together and say, "Oh, these vaccines are the cause of that," but as we mentioned before, there's a science out there that shows that that is not true. Um, you, you mentioned, you, uh, you know, the, the age when children are, um, typically diagnosed with autism and about the development and everything. Um, are there really, like, clear signs that a child will show that they may have traits of autism while they're, uh, in those developmental stages?

Dr. Margolis (15:14):

Uh, you know, I think that, uh, requires a pretty nuanced answer. I think there's certainly some key symptoms that are associated with autism. Um, when we make the diagnosis, we look at specific things, like social communication and interaction, uh, restrictive or repetitive behaviors, um, or, uh, speech disorders, but I think it's hard to say, like, a blanket statement like, "If this, this, and this is happening, then it must be autism." Um, I, I think, really, if there's worrisome symptoms or, or symptoms like on that checklist that screen positive, that's when you go to your next step of further diagnostic testing. So, you know, a kid who might have a speech delay for a many number of reasons, that doesn't mean that they have autism.

Deon (16:05):

Mm-hmm. Yeah. And that, you know, that would be one of the things that a parent would be worried about, but, like, uh, that, that doesn't necessar- necessarily mean that, uh, they may have autism. They could just be a late bloomer. They could, you know, they could just be a little, you know, not on your neighbor's child's, you know, developmental track. You know what I mean? 'Cause, uh, that's what, that's what we do as people. We compare our lives or what we're doing to someone across the street, but that doesn't necessarily mean that what's happening in our lives or our children's lives is not the right thing.

Dr. Margolis (16:37):

Absolutely. I think, you know, you can really get yourself in a, like, in a tizzy Googling-

Deon (16:43):

Oh, yeah.

Dr. Margolis (16:44):

... you know, "What should my child be doing at this age? They're not standing. They're not babbling. They're not doing this and that." A lot of those common ages that, you know, these benchmarks that we look for, these are a mean or an average and, you know, what most of the population is doing, and your kiddo might be a little bit behind, they might be a little bit ahead, and that, that doesn't mean that they're not gonna catch up. Um, and so I think when these fears happen, and I can't

stress this enough, talking to your pediatrician is your best thing to do because they're gonna be the ones to say, "You know what? This is totally normal o- and this is the plan, or I'm a little bit concerned about this, but let's watch it or let's go do some more diagnostic testing now." I mean, and really the person who's gonna that best is the pediatrician, far better than Google.

Deon (17:35):

(laughs) Right, and then, of course, a lot of times, when you try to talk to Dr. Google, you end up going down a rabbit hole, (laughs) and you find all this other stuff out that could make you worry for nothing, and you just have a conversation with your pediatrician and, you know, they will help you navigate what next steps to take.

Dr. Margolis (17:56):

Absolutely.

Deon (17:57):

Yeah. Dr. Margolis, is there anything else you would like our listeners to, to know more, uh, when it comes to autism and, and it, and, and vaccines and just, just the importance of this conversation?

Dr. Margolis (18:11):

Yeah. I, I think, you know, vaccines is always a hot button topic. There is a lot of different, um, articles and groups and, uh, you know, papers and all sorts of different resources that, uh, you know, are telling you 80 million different things, from different sides of, you know, pro-vax, anti-vax, um, but the end of the day, I think kind of, uh, ha- having those vetted resources, like the CDC, like the NIH, like the AAP, your pediatrician, so people who, you know, have given their lives to research these things, um, and, you know, using that as, uh, as a, a good sources, you know? You're getting that kind of scientific information to help guide your decision making, um, and especially in this issue, specifically as a pediatrician. I tell my patients every time they ask and remind them that there's no science that proves that there is, uh, a link or, you know, that vaccines cause autism. So, that certainly shouldn't be a reason not to vaccinate your child, vaccinate yourself, um, and, you know, please, please, please, go to those resources, talk to your pediatrician.

Deon (19:33):

Yeah. Great advice, um, Dr. Elizabeth Margolis. Thank you so much for the, the great conversation and giving us that insight, uh, about the science behind it all because that science is, is, is what we should follow in order to make those right decisions for ourselves and our families.

Dr. Margolis (19:54):

Thank you so much for having me.

Deon (19:54):

Well, what a great discussion we had today. Thanks for joining us. We hope you're leaving more informed. We'll see you next time.