

Web-Based Radio Show

Early Identification for Developmental and Learning Challenges

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Good morning and thank you for joining us. Today we're going to talk about a very important topic that we get lots of questions about, which is early identification of developmental and learning problems, including autistic spectrum disorders. This is timely and this week the Academy of Pediatrics issued a much needed report on the importance of early identification with some guidelines focusing on autistic spectrum disorders urging pediatricians to do screening at 18 months and 24 months. I would like to compliment the Academy for urging all the members to be more alert to the signs of developmental problems early in life – that's a very, very important and laudatory occurrence and a historic event in the history of picking up developmental problems as early as possible so early interventions can get started.

There are, however, a number of issues that this opens the door to that should be raised. The first issue is that we shouldn't be waiting until 18 months or 24 months. We should be screening for developmental challenges, including emotional and social challenges, from day one, just like we do for height and weight and nutritional status, etc. So, looking at human development should be broad-based and we should not just look at motor milestones and not just look at speech and language milestones and not just look for autistic spectrum milestones at 18 and 24 months; rather, we should be looking across the broad range of developmental capacities – emotional, social, motor, sensory, language, cognitive, etc. – from day one.

Number two, early in life – in the first few years – it's not important, and it's sometimes even counterproductive, to try to distinguish a specific disorder unless there's a clear genetic basis for it or a clear, infectious basis or some other etiological factor that can't be dealt with directly. If it's more of a global developmental problem, or a general developmental problem, it's not critical to make the specific diagnosis, but to deal with the functional deficit and create an environment through early intervention and home-based programs where parents learn to interact in ways that facilitate development, overcoming the functional deficit as early as possible. In a functional approach, where we look at the functional challenges in communication, for example, or in forming a relationship or in regulating oneself and we help the baby improve those capacities, in that sense – whether the challenge is a multi-risk family that's not providing the proper environment for the baby or due to a biologically based disorder, such as autism – we can begin helping that child very, very early in life.

A very important related issue is the kind of programs that can help. We have to be very cautious early in life always to have the intervention be part of a program that facilitates healthy development. If we "target" specific behaviors or use programs that have been tested on older children (who did not have the same diagnosis at 18 months or eight months) one might be tempted to use a program that was shown to be effective for older children with younger children where it may not be effective – it's kind of like using a




medication for adults on an eight-month-old; it may be very counterproductive and potentially even harmful. So, we have to always keep an eye on facilitating healthy development.

We brought a group of leading pediatricians and mental health professionals together a while back and, co-sponsored by our International Council for Developmental Learning Disorders and the CDC, who help organized this working group, we created a report that's on our www.ICDL.com website in which we focused on the need for a broad-based approach and incorporated these principles that I'm elucidating now, plus other principles.

Now let's go more systematically through the points that this raises. How do we pick up developmental problems as early as possible, even in the early months of life, like at four to six months, and not wait until 18 months? Well, we need to have a model of healthy development, which we have, where we look at how a baby focuses and attends; how a baby engages with others by four months; how a baby exchanges social signals and reciprocal interactions by eight to 10 months; and how a baby gets into what we call "shared social problem solving" by 10 to 12 months, where a little toddler will take you by the hand and show you what he wants through certain gestures. These broad functional capacities are far more effective in monitoring development than looking at one indicator, like whether a child smiles or whether he looks at you or whether a toddler responds to his or her name. A toddler may not respond to his name because of an issue in the family, but he may be evidencing the broad patterns – like taking you by the hand and showing you things – suggesting, basically, healthy development. The reason for not responding to his name may have to be investigated, but that behavior in and of itself, while perhaps having statistical significance in a large population, may not be the best tip of the iceberg, particularly when you can look at the whole iceberg. We have to make that distinction –between looking at the hypothesized tip of the iceberg versus the whole iceberg. Similarly, in terms of whether a child is looking at you, a baby who is a little hypersensitive to lights or who is visually sensitive may look off to the side a little bit, but may be very loving and engaging, initiating a lot of social interaction; you may get big, beatific smiles by four months and lots of reciprocal, back-and-forth exchange of signals by eight months, so a child's not directly looking at his caregiver may not be the most robust indicator of a challenge. Again, here, it's the tip of the iceberg versus looking at the whole iceberg. Well, it's pretty easy, actually, to look at the whole iceberg early in life, so we want to look at the whole iceberg.

We've outlined the healthy milestones in our book *Building Healthy Minds*, and we've outlined the early signs of deficits in these healthy milestones in both *Building Healthy Minds* and *Engaging Autism*, as well as in our book *Infants and Multi-Risk Families*. In our report, co-sponsored by ICDL and the CDC, we also have a nice description of what to look for in terms of healthy milestones and deficits in those milestones. The key is to have a very broad-based approach and a full understanding of what to expect in healthy growth and development, and then we can have what we call a "social and emotional growth chart," where we chart the child's or infant's development, just like we do height and weight. In fact, we have just such a social and emotional growth chart that's been published by PsyCorp, by Harcourt Assessment Incorporated, and it's been shown to be very reliable with a high degree of sensitivity and specificity, interestingly, specifically for autism, as well as for other developmental problems. For autism, the sensitivity and specificity are both over 85%, which means that it correctly identifies children with autistic spectrum disorders and it doesn't make many false identifications and that it does this on an ongoing basis; in other words, at each stage of development – you don't have to wait until a specific older age is reached. It's just a 10- to 15-minute questionnaire that parents can fill out by themselves or that a pediatrician can use to ask parents the appropriate questions. Either way works very, very well.




Now to try to be more specific, what we want to look for is the baby's ability in the first few months of life to focus and attend and stay calm and regulated, and the caregiver's ability to facilitate that because the problem can be in the relationship or because the baby is more challenging or because the family situation is challenging. There can be biological as well as experiential and environmental factors, but for quick identification the primary care physician or the educator needs only to recognize that the first step isn't happening and that may be an early sign of many, many different kinds of challenges. It's not critical to figure out which one right away, except to try to see if you can facilitate getting that "cooking" and then investigate the child's hearing, investigate the child's eyesight, investigate the child's motor system and see if anything biologically is contributing, as well as look at the family and the interaction between the child and his caregivers to see what other contributing factors may exist.

By four months you're looking for joyful, big smiles and an exchange of big smiles and what we call "engagement" or forming relationships. Here, too, if it's not happening we want to investigate all the factors. By eight months we want to look for – probably what is most important – a continuous back-and-forth interaction, with lots of social gesturing: smiles, head nods, arm movements, and lots of different emotions, in terms of exchanging facial expressions, such as looks of surprise, looks of glee, looks of annoyance, and looks of curiosity. We want to see, particularly, the infant initiating and we want to see the back-and-forth interaction where the parent or caregiver responds and the baby then initiates again and we get what we call "circles of communication." These long chains of reciprocal interactions that are highly varied and show lots of different emotions and lots of different social gestures with arms and facial expressions are something that we often see are not occurring to the same degree as with children who are at risk for autism. They tend not to initiate as much; they tend to react often. When we study videotapes of children with autistic spectrum disorders, we'll often see reaction smiles, but not that initiative and not the sustaining of the interaction. Interestingly, even when a child is three and four – even if the child has developed some language – often, that piece is missing, what we call the "continuous flow of back-and-forth interaction."

Then we get into the second year of life, between 12 and 16 months – but really as early as 12 to 14 months if that toddler's already walking, which is often the case, or even still crawling – and we see if there is a lot of continuous flow back-and-forth interaction used to solve problems, like to get to the toy or get to the juice, where the toddler is taking the parent by the hand, pointing to the refrigerator or pointing to the toy chest or pointing up to the shelf where the favorite book is and saying, "Ah! Ah!" and the parent is responding with a gesture, so that even without the use of words there are 50 or 60 gestures in a row to get to that toy or book or juice. When that's occurring, usually development is "cooking" and is going nicely. When it's not occurring, we've got a challenge of some sort. It could be environmental, it could be biological, or it could be an early sign of an autistic spectrum disorder emerging, but it could be related to other biologically based problems or environmentally based problems. Again, we don't need to make the diagnosis based on just observations and screening; we can investigate further, but it does give us the opportunity to see there is a functional challenge and we can start working on increasing those interactions, seeing if we can challenge or entice the toddler to take more initiative, to use more vocalizations and more physical gestures to indicate what their needs are. In both *Building Healthy Minds* and in *Engaging Autism* we show how to build a child's capacities. We've found, even with children who are at risk for autism, that there's enormous opportunity for growth if we approach it quickly and early and work functionally and not work in terms of particular syndromes.

By 18 months to two years, as a child begins to develop – in typical development – language and ideas, we look to see if the child is just repeating or whether he's initiating pretend play and being




imaginative and curious. If the child is being imaginative and creative, that's a very good sign; if he's just repeating or looking at a picture book and labeling, that doesn't tell us the development isn't healthy, but it isn't a sign of healthy development – it's just a sign the child has a good memory and may be good at visual memory or may be good at auditory memory, so we have to help that child get cooking and see if the child is capable of creative pretend play by giving opportunities for that with an active caregiver who entices the child into pretending and into using language to ask for the juice or for a hug or for something else that he wants, so we follow the child's natural interests and see if we can get that moving forward and cooking.

By 30 to 36 months we look for the child to be able to connect ideas together, not only answering all the “w” questions, but also when a child says, “go out” or “open door” and we say, “Why?” he can tell us, “because I want to play.” Or if a child is unhappy and we ask “Why?” he can say, “Because can't find toy.” If we say, “How do you feel?” he can say, “Sad.” So the child is able to connect ideas and identify feelings, etc. Usually that occurs between 36 months and 42 months, sometimes a little earlier for girls than boys. We want socially meaningful use of language where the child's connecting his or her ideas to your ideas.

So these early milestones – and these continue to go up the ladder and I won't go through all of them – are very good indicators of whether development is on target or not and when they're not present, again, the first step is to ask, “What can I do to facilitate it?” The second step, if the child is not responding to more opportunities, is to investigate what's going on to help identify the contributing factors – biological, experiential, and environmental ones. This is the whole DIR approach to early identification, but we shouldn't be waiting. We should look at that growth chart from day one and monitor development. When we do the full evaluation we can identify a particular syndrome, including one which is genetic, one having just speech and language problems, one that has more pervasive components and that may be part of the autistic spectrum disorders, but, again, the identification of a particular syndrome should not delay us from beginning to work with a child. Parents are the first people who can start working with their children and I urge them first to start trying to improve their child's functional abilities, following the guidelines in *Building Healthy Minds* and, if they suspect more pervasive problems, following the guidelines in *Engaging Autism*. These promote healthy development; you can't go wrong doing more of what we call “Floortime” and doing more playful interactions with your child.

I also caution against tending to use medications or dietary restrictions too early, as well as certain types of interventions which over focus on just one or two behaviors, because these can derail development rather than facilitate development, if you're becoming too structured with a child or having the child miss certain experiences that he needs, even if the child has a diagnosis, eventually, of an autistic spectrum disorder or another specific disorder. You want to have an approach, always, that fosters healthy development. The involvement of physical therapists, occupational therapists, speech pathologists, early educators and others is very helpful, but they need always to be using a healthy developmental approach so that we're always facilitating healthy development. Where there's chaotic family circumstances or a chaotic care giving situation or a child in a daycare center and there are too many children per caregiver and that's contributing, those factors need to be addressed. Support for the family, changing the childcare arrangements – they are all very, very important and at-risk children often may require more than they can get in a busy daycare center, even children who are developing typically may require more than they can get in a busy daycare center. So we have to assess all the factors.

We now have thousands of studies documenting what healthy emotional, social, and intellectual development looks like early in life. The deviation from this is the best early indicator, the best early sign.



We also now have a good picture of how to help the child practice those capacities that they need to develop to overcome some of these challenges, and the first step parents should be doing, even while having a full evaluation if it's indicated, is working with the child. So, we don't want to lose a day.

Thank you for listening and we will return next week with another show.