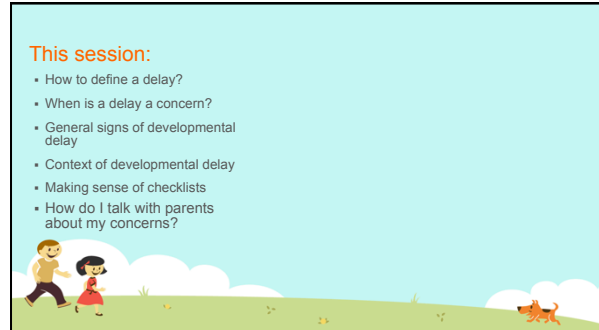




# Developmental Delay

How do I know when a child needs support?

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Clinical Psychologist for children



**This session:**

- How to define a delay?
- When is a delay a concern?
- General signs of developmental delay
- Context of developmental delay
- Making sense of checklists
- How do I talk with parents about my concerns?




## Developmental delays occurs in up to 15% of children under age 5

National Health and Medical Research Council. Child Health Screening and Surveillance: A critical review of the evidence. Canberra: NHMRC, 2002.



## Global Developmental Delay is diagnosed in approximately 1 -3% of children under 5



## Diagnosis on average occurs at 3½ years

Developmental and functional outcomes in children with global developmental delay or developmental language impairment.

Shevell, Michael; Majnemer, Annette; Platt, Robert W; Webster, Richard; Birmaher, Rena. *Developmental Medicine and Child Neurology* 47.10 (Oct 2005): 978-93.

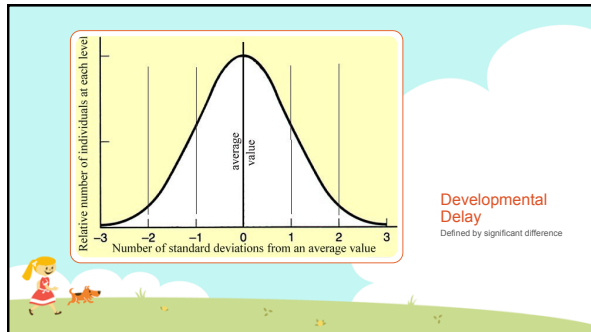


## When is a delay a concern?

- Significant lag behind age expectations
- Impacting on developmental sequence
- Failing to keep up with peers
- Falling further behind peers over time

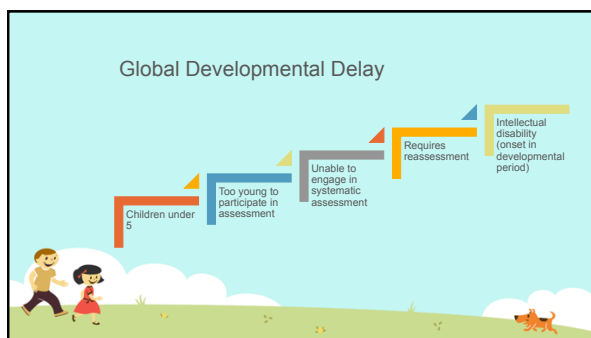
**Delays in:**

- Cognition
- Communication
- Fine Motor
- Gross Motor
- Social Interaction
- Behaviour
- Hearing and Vision



## Developmental delay or intellectual impairment-what's the difference?

Do most children with a global developmental delay develop intellectual impairments?



## Most children with GDD will be later diagnosed with an intellectual impairment

Shevell, M. (2008) Global developmental delay and mental retardation or intellectual disability: Conceptualization, evaluation and etiology. *Paediatric Clinics of North America*, 55:5,1071-1084

## Cognition

- Plays like a younger child
- Takes longer to learn new skills
- May need many repetitions
- Difficulty attending to task
- Changing activity frequently in unstructured situations
- Gives up quickly on problem-solving tasks (Difficulties with cause-and-effect after 18 months)
- Difficulties with object permanence after about 9 months

## Gross motor

- Feels floppy or still to hold
- Dislikes being moved from one position to another
- Lacks movement variety or doesn't move much
- Difficulties lifting head after 3 months
- Difference in movement skills between sides of the body after 4 months
- Not sitting by 10 months, not walking by 18 months
- Scissoring or crossing feet in standing position
- Walking constantly on toes
- Clumsy for their age

## Social interaction

- Does not look at faces
- Rarely makes eye contact
- Doesn't seem to enjoy interacting with familiar people
- Does express much affection with family or other familiar people
- Doesn't imitate actions
- Limited or no spontaneous play
- Excessively aggressive or withdrawn with peers



## Communication

- Limited or no babbling
- Significant lag in words and word combinations
- Repeated echoing of others speech
- Reliance on visual cues
- Frustration/aggressive behaviour combined with poor speech development for age



## Fine motor

- Not banging blocks together and engaging in hand-mouth activities after 8 months.
- Early presence of unilateral dominance or handedness in a child less than 15 months of age
- Persistently uses only one hand in play
- Delay in touching parts of the body (not touching feet after 6 months)
- Having trouble holding or moving an object eg managing a cup or scribbling with a crayon



## Play

- Preference for rough and tumble play
  - ? Meets sensory needs
  - ? Does not demand fine motor/cognitive skills
  - ? Can participate and succeed
- Object exploration (basic sensory motor play) continues beyond 3 years when other children are developing more skillful play forms (drawing/doll play)
- Interest in pretend play does not emerge until older

[Play Preferences of Typically Developing Children and Children With Developmental Delays Between Ages 3 and 7 Years](#)

Case-Smith, Jane; Kuhaneck, Heather Miller. OTJR28.1 (Winter 2008): 19-29



## Behaviour

- Limited range of emotions
- Poor emotional regulation
- Not responding to parents' requests
- Not persistent with any activities
- Showing little pleasure in achievements
- Hesitant/not confident in most situations
- Obsessions with unusual objects or movement
- Repeating same simple play activity for long periods of time
- Engagement in repetitive movements



## Behaviour and Global Developmental Delay

- 42% of parents reported behaviour problems
- 25% of the children scored in the borderline range or above on the total score
- 2-year old children with developmental delay exhibit similar rates of behavior problems as children without developmental delay.
- However there were 'sub clinical' level which suggest specific risk in 2 year old children
- 2-year old children with developmental delay had fewer behavior problems than children aged 4 years and older with developmental delay

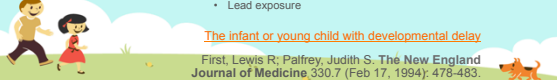
**Behavior Problems in Young Children With or At Risk for Developmental Delay**  
Maurice A. Feldman, Christie L. Hancock, Nicole Reilly, Patricia Minnes, and Colleen Cairns  
*Journal of Child and Family Studies*, Vol. 9, No. 2, 2000, pp. 247-261



### Developmental Delay Risk Factors


<b>Prenatal maternal factors</b> <ul style="list-style-type: none"> <li>• Acute or chronic illness</li> <li>• Drug or alcohol use</li> <li>• Previous miscarriage or still birth</li> <li>• Toxemia</li> </ul>	<b>Neonatal factors</b> <ul style="list-style-type: none"> <li>• Neurological events</li> <li>• Sepsis/Meningitis</li> <li>• Severe jaundice</li> <li>• Hypoxia</li> </ul>	<b>Family history factors</b> <ul style="list-style-type: none"> <li>• Developmental delay</li> <li>• Disability</li> </ul>
<b>Perinatal factors</b> <ul style="list-style-type: none"> <li>• Obstetrical complications</li> <li>• Prematurity</li> <li>• Low birth weight</li> <li>• Multiple gestation</li> </ul>	<b>Postnatal factors</b> <ul style="list-style-type: none"> <li>• Seizures</li> <li>• Meningitis</li> <li>• Recurrent Otitis Media</li> <li>• Poor feeding</li> <li>• Poor growth</li> <li>• Lead exposure</li> </ul>	<b>Social factors</b> <ul style="list-style-type: none"> <li>• Abuse or neglect</li> <li>• Limited social/financial support</li> <li>• Teenage parents</li> <li>• Single parents</li> <li>• Stressful life events</li> </ul>

**The infant or young child with developmental delay**  
 First, Lewis R; Palfrey, Judith S. *The New England Journal of Medicine* 330.7 (Feb 17, 1994): 478-483.



### Socioeconomic factors of the family has a greater effect than biological factors on the children's development up to age 5 years.

**The socioeconomic and biological risk factors for developmental delay in early childhood**  
 Ozkan, Mehpare; Senel, Saliha; Arslan, Emel Akbas; Karacan, Can Demir. *European Journal of Pediatrics* 171.12 (Dec 2012): 1815-21.




**The period from birth to 5 years is critical** for the development of language, cognitive, emotional, social, behavioral, and physical skills.

Early childhood is **the most effective time** to ensure that all children develop their full potential.

Developmental disorders in children **range** from subtle learning disabilities to severe cognitive/motor impairment.

**Early recognition** of developmental problems is important for timely intervention

However, **only 30%** of such cases are identified before they begin school.



### Where to from here?

<b>Using checklists</b> <ul style="list-style-type: none"> <li>• Tell us what children can and cannot do</li> <li>• Use milestones as measures</li> <li>• Compare children to their same aged peers</li> </ul>	<b>Consider alongside</b> <ul style="list-style-type: none"> <li>• Observations across time and settings</li> <li>• Some milestones are more critical to overall than others</li> <li>• We can trace the affects of one aspect of development on another</li> <li>• Development needs to be considered in context of everyday situations and family culture</li> <li>• Overall profile of the child</li> </ul>
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### Take home messages

Establishing the presence of developmental delay can be challenging.

Typical variation is wide ranging

Reticence about discussing fears and confront the painful reality


Natural reluctance accounts for the common pitfall of overreliance on normal variation as an explanation.

Use the phrase "They'll grow out of it" or "It's just a phase" with caution.




### Talking with parents

**When you have a concern about a child's development**



## It can be difficult to raise concerns!

- How the parents will react
- Family is already stressed
- Uncertain as to exactly what is going on for the child
- Our own anxiety
- Finding the right time/place
- Where to refer the family too?



## Parents' experiences pre-diagnosis

- Unable to articulate concerns to health professionals
- Lack of engagement with their concerns
- Concerns with labelling
- Fears of social isolation and rejection
- Influence of negative public views
- Concerns about medicating



*'So yes, sometimes there are little signs there. Sometimes when you have got a busy life and, you know, you work full time and you know you don't have as much time with the children as you would like [um] you don't always pick up on the signals early enough but intuitively I felt there was something that wasn't quite as it should be but I really couldn't put my finger on it.'*

*'Just watching him play with the other children, you realised that something wasn't right [...] But because we were new parents, we didn't know, we never knew there was anything wrong.'*


Br J Gen Pract. 2012 May; 62(598): e378-e383.  
"You know what boys are like": pre-diagnosis experiences of parents of children with autism spectrum conditions. Sara Ryan and Helen Salisbury



*'Then [er] he moved to another ... a nursery school and they didn't actually tell me there was, they sort of mentioned to me that he wouldn't sleep in the afternoons. He would disturb the other children and so I took him to my GP and said, "You know the nursery school have suggested I bring him to you because he won't rest in the afternoon". And she was, "Like oh well my daughter is four, and she won't rest in the afternoon either".'*


*'When he was 10 months I remember going to the health visitor because he was nipping and biting and he was really hard going. He pulled the stair gates off the wall. He could launch himself over it. He climbed up furniture. He was really, really dangerous. But the health visitor just said, "No, you know what boys are like".'*

Br J Gen Pract. 2012 May; 62(598): e378-e383.  
"You know what boys are like": pre-diagnosis experiences of parents of children with autism spectrum conditions. Sara Ryan and Helen Salisbury




## Reassurance can be counter productive

- Lost opportunities for Early Intervention
- Distress and uncertainty
- Feeling isolated and alone



## 'The paediatric provider's willingness to share that uncertainty with families is critically important to preserve and strengthen the relationship between family and clinician.'

Caronna EB, Augustyn M, Zuckerman B. Revisiting parental concerns in the age of autism spectrum disorders: the need to help parents in the face of uncertainty. Arch Pediatr Adolesc Med. 2007;161(4):406-408.



**Family needs:**

- Empathy
- Privacy
- Time
- Support person
- Information
- Trust

→

The importance of "knowing"

- Understanding the cause for the disability
- Gaining knowledge about future expectations
- To discover appropriate interventions
- Gaining access to funding or specific services

"Something you have to do" - Why do parents of children with developmental disabilities seek a differential diagnosis?  
Version 6.1 - October 2014  
18/08/15




Be aware of your limitations in making a diagnosis



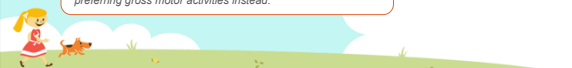
**Diagnosis**

- Diagnosis is a formal and comprehensive process
- Differentials need to be considered
- Many developmental diagnosis include similar symptoms (they can look the same)



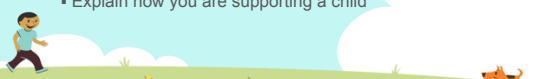
James is a 4 year old boy attending your centre 3 days a week. He is a bright boy with lots of energy. He enjoys coming to your centre! He has some good communication skills but has difficulties using them in social situations. He seems competitive and gets upset if he doesn't get to be first. He has difficulty with eye contact. James mostly has a short attention span for his age but can concentrate for longer periods if it's an activity he's really interested in, like computer games or a TV show. James is keen to make friends but he just doesn't seem to know how! He chases the other children making funny faces instead of asking to join in. James can be aggressive with the other children, too, especially when he is having trouble getting his own way. Because of this behaviour, the other children are starting to avoid James. James is a bit behind in his fine motor skills, he has trouble with his pencil grip and so he avoids drawing, preferring gross motor activities instead.

**Time for case study!**



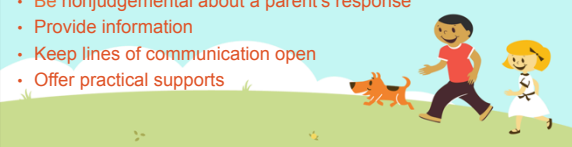
**You can:**

- Comment knowledgeably about typical development
- Identify a child's strengths
- Recognise areas in which a child may not be achieving expected milestones
- Share your observations
- Explain how you are supporting a child




**You can:**

- Affirm a parents' competency and love for their child
- Highlight the parents' knowledge of their child
- Be nonjudgemental about a parent's response
- Provide information
- Keep lines of communication open
- Offer practical supports



When you have not observed any concerns in a child's development:

*'Nothing you have told me makes me worried that your child has a problem but I can see that you are concerned. Why don't we meet in 4 weeks and meanwhile we can keep a note of ... You might also like to talk with your GP about your concerns'*



**Thoughts to keep in mind....**

- Focus on **strengths** as well as needs
- Affirm parent's concerns
- Use **active listening**
  - Open ended questions
  - Reflect back to the parent whether you agree or disagree
- Talk about **how you can help** a child
- **Offer** information

