# **Attention Deficit Hyperactivity Disorder**

### He just can't sit still!

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(with many thanks to Dr Megan Yap for slide contribution "Dr Megs – Paeds & Feeds" & http://www.kidshealth.guru/)



# ACKNOWLEDGEMENT

Western Health acknowledges the Traditional Custodians of the land on which our sites stand. The Wurundjeri Woi-Wurrung, Boon Wurrung and Bunurong peoples of the greater Kulin Nation. We pay respects to Elders past, present and emerging.

We are committed to the healing of country, working towards equity in health outcomes, and the ongoing journey of reconciliation.

Western Health is committed to respectfully listening and learning from Aboriginal and Torres Strait Islander people and wholeheartedly supports their journey to self-determination.





#### **Our service**







# Attention Deficit Hyperactivity Disorder

- What is neurodiversity and where does ADHD fit in
- What is ADHD and what does this look like in children
- Diagnosis of ADHD
- The role of paediatricians and GPs
- Management of ADHD
  - Pharmacological Strategies
  - Non-pharmacological Strategies

#### The Make-up of Neuro-Diversity

This is a document for discussion, concentrating mainly on the difficulties of those with neuro-diversity. It must however be pointed out that many such people are excellent at maths, co-ordination, reading etc. We are people of extremes.

#### Dyspraxia/DCD

Difficulties with planning, movements, co-ordination and practical tasks as well as tracking and balance, poor spatial awareness and muscle tone

> Over and under-sensitive to light. noise, touch, and temperature. Speech and language difficulties

#### Autism spectrum disorder (ASD) including Asperger's Syndrome

Social and communication problems. Obsessive interests. Difference in imagination Dyscalculia Dyscalculia Difficulties with number concepts and calculation

#### **Neuro-Diversity**

Difficulties with organisation, memory, concentration, time, direction, perception, sequencing. Poor listening skills. All may lead to low self-esteem, anxiety, and depression if others are not aware. Can be creative, original, determined.

Tourette's Syndrome Verbal and physical tics Dyslexia Difficulty with words: reading, writing,

spelling, speaking, listening. Preference for non-linear thought

Lack of concentration, distractibility

#### AD(H)D

Impulsive, temper outbursts, hyperactivity Low frustration threshold Easily distracted or overfocused

Created by Mary Colley



# Myths and misconceptions

- Kids with ADHD are just naughty
- They need firmer boundaries
- It's all because of sugar
- Only boys have ADHD
- They will outgrow it
- If they can focus on the TV / their own interest, they can't have ADHD

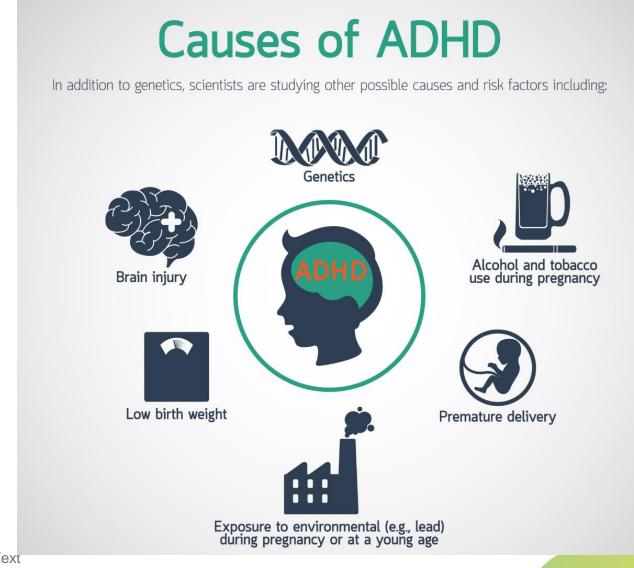


#### ADHD in Australia

- Around 1 in 20 Australians have ADHD
- ADHD is the most prevalent mental disorder affecting children in Australia (281,200 Australian Children aged 0-19y)
- More than three-quarters of children continue to experience symptoms into adulthood.
- More common in boys



#### Causes of ADHD





# What does it look like – The DSM-V?

- Three subtypes
  - 1. Predominantly hyperactive
  - 2. Predominantly inattentive
  - 3. Mixed
  - Across at least two settings ie home and school
  - Present for at least 6 months



#### Inattentive Subtype

# Six (or five for people over 17 years) of the following symptoms occur frequently:

- Lack of attention to detail/mistakes
- Drifts off during classes
- Distracted
- Starts things and doesn't finish them
- Disorganised; procrastinates
- Loses things
- Poor at adulting (!)



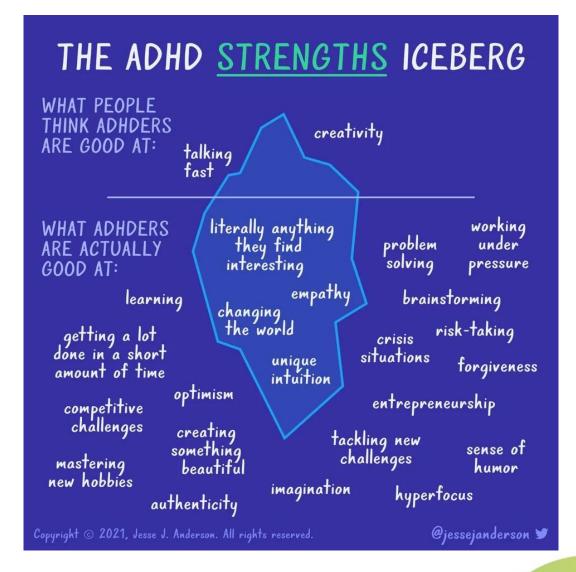
# Hyperactive/Impulsive Subtype:

*Six (or five for people over 17 years) of the following symptoms occur frequently:* 

- Fidgets with or taps hands or feet, or squirms in seat.
- Not able to stay seated (in classroom, workplace).
- Runs about or climbs where it is inappropriate.
- Unable to play or do leisure activities quietly.
- Always "on the go," as if driven by a motor.
- Talks too much.
- Blurts out an answer before a question has been finished
- Has difficulty waiting his or her turn, such as while waiting in line.
- Interrupts or intrudes on others

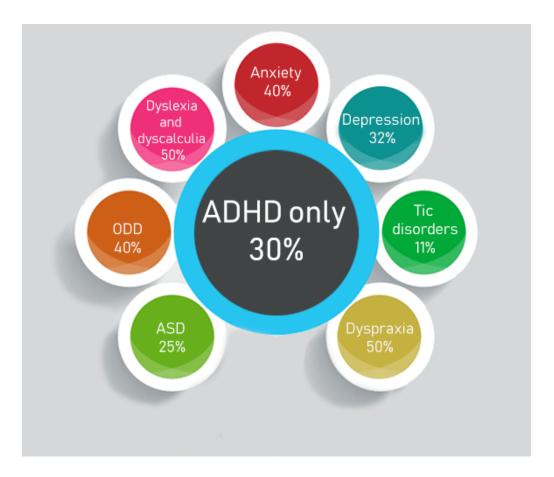


#### Superpowers of ADHD





#### **Co-morbidities**





#### Diagnosis

- Collateral history from home and school
- Broadband questionnaires or ADHD rating scales

SNAP-IV 26-Item Teacher and Parent Rating James M. Swanson, Ph.D., University of California, Irvi		15		
Patient/Client Name:				
Date of birth:	Gender:			
Grade: Type of class:	Class size:			
Completed by:				
	Date:			
Physician Name:				
For each item, check the column which best describes this child/adolescent:				
For each item, check the column which best describes this child/adolescent.				
	Not at all	Just a	Quite	Ve
1. Often fails to give close attention to details or makes careless mistakes	all	little	a bit	m
<ol> <li>Orten fails to give close attention to details or makes careless mistakes in schoolwork or tasks</li> </ol>				
2. Often has difficulty sustaining attention in tasks or play activities	-			
3. Often does not seem to listen when spoken to directly				
4. Often does not follow through on instructions and fails to finish				
schoolwork, chores, or duties				
<ol><li>Often has difficulty organizing tasks and activities</li></ol>				
<ol><li>Often avoids, dislikes, or reluctantly engages in tasks requiring</li></ol>				
sustained mental effort	_			
<ol> <li>Often loses things necessary for activities (e.g., toys, school assignments, pencils or books</li> </ol>				
8. Often is distracted by extraneous stimuli	-			
9. Often is forgetful in daily activities				
10. Often fidgets with hands or feet or squirms in seat				
11. Often leaves seat in classroom or in other situations in which remaining	2			
seated is expected	·			
12. Often runs about or climbs excessively in situations in which it is				
inappropriate				
13. Often has difficulty playing or engaging in leisure activities quietly				
14. Often is "on the go" or often acts as if "driven by a motor" 15. Often talks excessively				
16. Often blurts out answers before questions have been completed	-			
17. Often has difficulty awaiting turn				
18. Often interrupts or intrudes on others (e.g., butts into conversations/	-			1
games				
19. Often loses temper				
20. Often argues with adults				
21. Often actively defies or refuses adult requests or rules				
22. Often deliberately does things that annoy other people				
23. Often blames others for his or her mistakes or misbehaviour				1

#### For office use only ID # **TEACHER'S REPORT FORM FOR AGES 6-18**

You answer will be used to compare the pupil with other pupile whose tachers have completed similar forms. The information from this form will also be used for comparison with other information about this pupil. Rease answer as well as you can, each if you tack full information. Scores on individual items will be combined to identify general patterns of behavior. Feel free to print additional comments beaide each item and in the spaces provided on page 2. Please print, and answer all items.

	noe each item and in the spaces	pierided en page 2. Trease print, and another an inemer
PUPIL'S First Mi FULL NAME	ddle Last	PARENTS' USUAL TYPE OF WORK, even if not working now (Please be specific — for example, auto mechanic, high school teacher, homemaker, laborer, lathe operator, shoe salesman, army sergeant.)
PUPIL'S GENDER PUPIL'S AGE	PUPIL'S ETHNIC GROUP OR RACE	FATHER'S TYPE OF WORK
TODAY'S DATE Mo Date Yr	PUPIL'S BIRTHDATE (if known) Mo Date Yr	THIS FORM FILLED OUT BY: (print your full name)
GRADE NAME AND ADDRE	SS OF SCHOOL	Your gender: Maile Female Your role at the school: Classroom Teacher Counselor Decial Educator Administrator Teacher's Aide Other (specify):

I.	For how many months have you known this pupil?	months

II. How well do you know him/her? 1. Not Well 2. Moderately Well 3. Very Well

#### III. How much time does he/she spend in your class or service per week?

Ø

IV. What kind of class or service is it? (Please be specific, e.g., regular 5th grade, 7th grade math, learning disability, counseling, etc.)

V. Has he/she ever been referred for special class placement, services, or tutoring? Don't Know 0. No 1. Yes - what kind and when?

VI. Has he/she repeated any grades? Don't Know 0. No 1. Yes - grades and reasons:

VII. Current academic performance -- list academic subjects and check box that indicates pupil's performance for each

subject:					
Academic subject	1. Far below grade	2. Somewhat below grade	3. At grade level	4. Somewhat above grade	5. Far above grade
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	•		o		0
·			σ		o
					σ
			٥		σ
		B	e sure you ans	wered all items. Th	en see other sid

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www.ASEBA.org	PAGE 1	

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NICHQ Vanderblit Assessment Scale—PARENT Informant							
Today's Date:	Child's Name:		Date of Birth:				
Parent's Name:		Parent's Phone Number:					

#### <u>Directions:</u> Each rating should be considered in the context of what is appropriate for the age of your child. When completing this form, please think about your child's behaviors in the past <u>6 months</u>.

Is this evaluation based on a time when the child 💦 was on medication 🗌 was not on medication 📄 not sure?

Symptoms	Never	Occasionally	Often	Very Ofte
<ol> <li>Does not pay attention to details or makes careless mistakes with, for example, homework</li> </ol>	0	1	2	3
2. Has difficulty keeping attention to what needs to be done	0	1	2	3
3. Does not seem to listen when spoken to directly	0	1	2	3
<ol> <li>Does not follow through when given directions and fails to finish activities (not due to refusal or failure to understand)</li> </ol>	0	1	2	3
<ol><li>Has difficulty organizing tasks and activities</li></ol>	0	1	2	3
<ol> <li>Avoids, dislikes, or does not want to start tasks that require ongoing mental effort</li> </ol>	0	1	2	3
<ol> <li>Loses things necessary for tasks or activities (toys, assignments, pencils, or books)</li> </ol>	0	1	2	3
<ol><li>Is easily distracted by noises or other stimuli</li></ol>	0	1	2	3
<ol><li>Is forgetful in daily activities</li></ol>	0	1	2	3
<ol><li>Fidgets with hands or feet or squirms in seat</li></ol>	0	1	2	3
<ol> <li>Leaves seat when remaining seated is expected</li> </ol>	0	1	2	3
12. Runs about or climbs too much when remaining seated is expected	0	1	2	3
<ol><li>Has difficulty playing or beginning quiet play activities</li></ol>	0	1	2	3
<ol><li>Is "on the go" or often acts as if "driven by a motor"</li></ol>	0	1	2	3
15. Talks too much	0	1	2	3
<ol><li>Blurts out answers before questions have been completed</li></ol>	0	1	2	3
17. Has difficulty waiting his or her turn	0	1	2	3
18. Interrupts or intrudes in on others' conversations and/or activities	0	1	2	3
19. Argues with adults	0	1	2	3
20. Loses temper	0	1	2	3
21. Actively defies or refuses to go along with adults' requests or rules	0	1	2	3
22. Deliberately annoys people	0	1	2	3
23. Blames others for his or her mistakes or misbehaviors	0	1	2	3
24. Is touchy or easily annoyed by others	0	1	2	3
25. Is angry or resentful	0	1	2	3
26. Is spiteful and wants to get even	0	1	2	3
27. Bullies, threatens, or intimidates others	0	1	2	3
28. Starts physical fights	0	1	2	3
29. Lies to get out of trouble or to avoid obligations (ie, "cons" others)	0	1	2	3
30. Is truant from school (skips school) without permission	0	1	2	3
31. Is physically cruel to people	0	1	2	3
32. Has stolen things that have value	0	1	2	3
e information contained in this publication should not be used as a substitute for the Copyrig	ht @2002 Ame	rican Academy of Pediatri	os and National	Initiative for Chi

medical care and advice of your pediatrician. There may be variations in treatment that

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your pediatrician may recommend based on individual facts and circumstances

AME		AND STREET, ST				erator, shi	oe salesman, army	sergeant.)		
CHILD'S GENDER	CHILD'S AGE	CHILD'S ETHNIC OR RACE	GROUP	TYPE	PATHERS TYPE OF WORK MORIERS TYPE OF WORK THIS FORM FILLED OUT BY: (print your full name)					
TODAY'S DATE		CHILD'S BIRTHDAT								
GRADE IN SCHOOL	child's behavi agree. Feel beside each it	this form to reflect or even if other p free to print addit tem and in the sp	tional comm ace provide	of the Your gender: Male Female ments Your relation to the child:						
SCHOOL D		ure to answer all			Adoptive Par		Foster Parent	Other (s		_
<ol> <li>Please list the spot to take part in. For baseball, skating, st</li> </ol>	r example: swir	mming,	age, ab he/she					w well do	ers of the es he/she	
riding, fishing, etc.			Less Than Average	Average	More Than Average	Don't Know	Below Average	Average	Above Average	Don't Know
a										
b										
c										
II. Please list your child's favorite hobbies, activities, and games, other than sports. For example: stamps. dolls, books, piano.		n sports. , piano,	Compared to others of the same age, about how much time does he/she spend in each? each one?							
crafts, cars, compu include listening to None		lc. (Do not	Less Than Average	Average	More Than Average	Don't Know	Below Average	Average	Above Average	Don't Know
a,					П					
1001010				П	n	п	П	П	п	П
C										
III. Please list any o or groups your o					ners of the		,			
□ None			Less	Average	More	Don't Know				
a										
b										

Lost

Please print CHILD BEHAVIOR CHECKLIST FOR AGES 6-18

PARENTS' USUAL TYPE OF WORK, even if not working now. (Please be specific — for example, auto mschanic, high school feacher, homemaker, laborer, fathe operator, shoe salesman, army sergeant.)

Be sure you answered all items. Then see other side. 6-1-01 Edition - 201

For example: paper route, babysitting, making bed, working in store, etc. (Include both paid and unpaid jobs and chores.)		w well do	es he/she		
None     a	Below Average	Average	Above Average	Don't Know	
b					
c					
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CHILD'S

First

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Adapted from the Vanderbilt Rating Scales developed by Mark L. Wolraich, MD. Revised - 1102





# To Treat or Not to Treat

- Factors to consider:
  - Concerns from school
  - Child self-rating
  - Family's attitude
- Risks of not-treating or undiagnosed:
  - Increase risk of mental health issues including low self-esteem, depression, anxiety
  - Difficulty in relationships ie. Partner, parent-child
  - Job instability
  - Substance use
  - Increased mortality rate



#### Treatment: Non- pharmacology

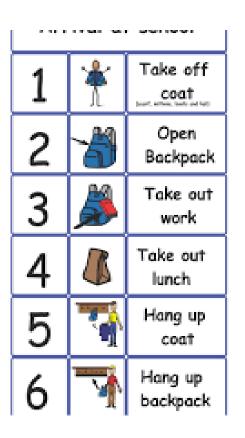
- 1. Routine
- 2. Parenting
- 3. Sleep
- 4. Nutritional
- 5. Other professionals

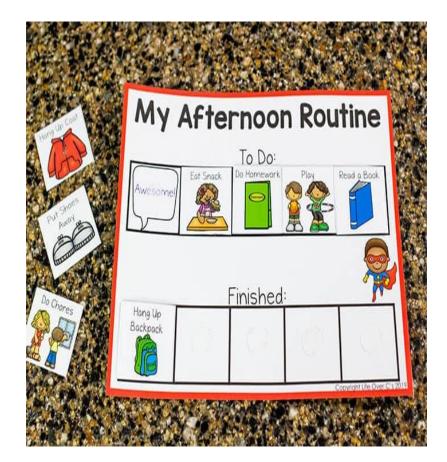


#### Routine

- Predictable day to day routine.
- Limiting screen time.
- Ensuring daily physical exercise and involving entire family.
- May benefit from help of OT or Speech therapist.









### Parenting

- Ensuring stability in household
- Consistent boundaries applicable to household
- Referral to services such as Social Work at community services and Orange Door
- Use of parenting programs:
  - Circle of Security
  - Triple P parenting



# Sleep

- Establishing sleep routine and adherence
- Optimising sleep hygiene and minimizing screen time
- Other resources:
  - Melatonin
  - Raising children's network



#### Nutritional

- Common question for parents
- Generally diet recommendations include healthy balanced diet, especially for children
- Research not supportive of elimination diets
- Some evidence supporting use of Fish Oil



#### Other professionals

- Occupational Therapist to help with hyperactivity, selfregulation, sensory issues
- Psychologist to help with emotional regulation, impulsivity and family dynamics
- ADHD coach for young people lived strategies
- Teachers classroom strategies
- Written resources



# Pharmacological

Type of Medication	Brand Name	Generic Name	Duration				
Stimulants							
Short Acting amphetamine	-	Dexamphetamine	4-6h				
Short Acting methylphenidate	Ritalin SA	Methylphenidate	3-5h				
Intermediate acting methylphenidate	Ritalin LA	ER Methylphenidate	6-8h				
Long acting amphetamine	Vyvanse	Lisdexamphetamine	10-12h				
Long acting methylphenidate	Concerta	ER Methylphenidate	10-12h				
Long acting non-stimulants							
	Intuniv	Guanfacine	24h				
	Catapres	Clonidine	12h				
	Strattera	Atomoxetine	24h				



# Side effects of Stimulants

- Sleep initiation difficulties
- Reduced appetite
- Mood changes including emotional lability
- Worsening of tics and anxiety
- Cardiovascular effects



# Monitoring

- Presence of side effects
- Growth including height and weight
- Patient, family/carer and teacher opinions
- Cardiovascular system especially blood pressure
- Ensure long-term plan discussed with families



# Role of the GP

- If you are concerned about the child:
  - Start a discussion
  - Make referrals to services
    - Include as much information as you have!
  - Screen for medical issues
    - Hearing
    - Nutrition (including bloods if indicated)
    - Sleep



# **Ongoing GP Management**

- Monitoring weight and BP
- Monitoring co morbidities
- Checking in on family function, school attendance, engagement with therapies
- Repeat scripts?



# Applying for a permit

#### <u>Application for a permit to treat a patient with Schedule 8 drugs</u> (business.gov.au)

General practitioners will generally only be issued with permits to prescribe dexamphetamine, lisdexamfetamine or methylphenidate where there is evidence of a specialist diagnosis and that a specialist review has taken place within a specified period.

# HealthPathways - New Pathway!

#### **ADHD In Children and Youth**

ADHD diagnosis usually starts with a visit to the GP. The earlier ADHD is assessed and managed the better the outcome for the child and the family. *HealthPathways Melbourne* have developed a new pathway to help you assess and support the child and family, providing resources, referral guidelines and local service information.

#### ADHD in Children and Youth

#### Written by

#### **Clinical Editor:**

• Dr Scott Parsons - General Practitioner, Royal Children's Hospital

#### Subject Matter Experts:

#### Prof Harriet Hiscock

Consultant Paediatrician, NHMRC Practitioner Fellow, Associate Director, Research at the Centre for Community Child Health, Director of the Royal Children's Hospital Health Services Research Unit and Group Leader, Health Services, Murdoch Children's Research Institute. A/Prof Daryl Efron

Paediatrician, Royal Children's Hospital; Senior Research Fellow, Murdoch Children's Research Institute; Associate Professor of Paediatrics, University of Melbourne



### **Other Useful Resources**

- AADPA National Guidelines
- Raising Children Network
- RCH ADHD information
- Department of Health
  - https://www.health.vic.gov.au/drugs-and-poisons/stimulants-for-adhd-or-narcolepsypermit-requirements#other-medical-practitioners-not-paediatricians-and-psychiatrists



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#### Session conclusion

You will receive a post session email within a week which will include slides and resources discussed during this session. We value your

feedback, let us know Attendance certificate will be received within 4-6 weeks.your thoughts.

RACGP CPD hours will be uploaded within 30 days.

To attend further education sessions, visit, https://nwmphn.org.au/resources-events/events/

This session was recorded, and you will be able to view the recording at this link within the next week.

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